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# THE PAINTED DECORATION OF THE POTTERY FROM THE ENEOLITHIC STATION NEAR ATMAGEAUA-TĂTĂRASCĂ

(Department of Durostor, Dobrogea, Rumania)<sup>1</sup>

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WITH PLATES I-V

THE eneolithic station discovered near the village Atmageaua-Tătărască—with which I have already had the opportunity to occupy myself<sup>2</sup>—belongs, in a general way, to the balkano-danubian civilisation of the Gumelnița type.<sup>3</sup> Consequently, it cannot be included within the area of genuine painted pottery,<sup>4</sup> the painting, although one of the important elements of the pottery ornamentation in the Gumelnița civilisation, not being its most characteristic feature. In fact, though painting is indeed seldom absent from the ceramic decoration of the settlements belonging to the Gumelnița civilisation, relief ornament, and particularly incised ornament, is always found in greater quantity and greater variety, and may thus be considered the essential factor.

1. This question was the subject of a paper I presented at the second session of the International Congress of prehistoric and protohistoric Sciences from Oslo (August 3-9, 1936).

2. The detailed report of the excavations pursued in the years 1929-1935 at Atmageaua-Tătărască will be issued in vol. IV-VI (1935-1936) of the year-book *Dacia, recherches et découvertes archéologiques en Roumanie*. The stratigraphy of this station and its importance for the stratigraphy of the neo-eneolithic balkano-danubian civilisation was treated in a communication made at the first sitting of the International Congress of Prehistoric Sciences (cf. Vladimir Dumitrescu, 'La stratigraphie des stations appartenant à la civilisation énéolithique balkano-danubienne, à la lumière des fouilles de Atmageaua-Tătărască,' in *Proceedings of the First International Congress of Prehistoric and Protohistoric Sciences*, London, 1934, pp. 208-209, and in *Istros, revue roumaine d'archéologie et d'histoire ancienne*, I (Bucarest, 1934), I, pp. 37-43). Incidentally, certain discoveries from Atmagea were discussed in my articles 'A propos de la peinture de quelques vases de Gumelnița' (in *Revista Istorică Română*, I, pp. 403-415), and 'Betrachtungen über die "Steckdosen" der rumänisch-bulgarischen Boian A-Kultur,' in *W.P.Z.*, XXIII, 1936, pp. 142-150.

3. This neo-eneolithic civilisation, formerly known as the civilisation of the Bulgarian tells, has since been named the Gumelnița civilisation, after the settlement in Wallachia (excavated by myself, in 1925), where precise stratigraphic observations were first made (cf. Vladimir Dumitrescu, 'Fouilles de Gumelnița,' in *Dacia*, II, 1925, pp. 29-103).

4. C. Schuchhardt, in his *Alteuropa*, third ed. (Berlin-Leipzig, 1935), still includes in the same chapter and in the same culture belt, beside Cucuteni-Tripolje, the Balkano-Danubian civilisation of the Gumelnița type; which is in fact an error, as these are—in spite of their connexions—two distinct civilisations, the Gumelnița, at any rate, being not essentially a civilisation of painted pottery. And, obviously, the Boian A civilisation can even less be considered as such.



Nevertheless, the painted ornaments appertaining to the Gumelnița civilisation are sufficiently varied to make any relations with the contemporary civilisations, particularly with the painted pottery civilisation from Cucuteni, interesting. A short survey of the painted ceramic decoration at Atmagea may not be then devoid of interest, the more so as the following remarks are based on an examination of all the vases and sherds (even if all are not dealt with here) adorned with painted ornament found in the four culture strata that we could identify at Atmagea.

I. Of these culture strata, the oldest does not belong to the Gumelnița civilisation but, as was repeatedly made clear, to Boian A.<sup>1</sup> This civilisation is characterised by a pottery decorated with deep grooves—chiefly meander and spiral designs—filled with white or, less frequently, red paste. Yet, besides this grooved ware, there are other kinds of pottery in Boian A, of which the fluted and incised vases are most important.<sup>2</sup> At Atmagea, in the first stratum (Boian A), only a few fragments occurred with painted ornament, and these were all *graphite* painted. Not a single sherd painted white or red, in the crusted ware technique, as found elsewhere, was met with.<sup>3</sup>

The ornamental motives are the wolf's teeth, obtained either by reserving them on the slipped ground (negative ornament), or, on the contrary, by painting them (positive ornament; Pl. I a, 1). On

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1. The Boian A civilisation took its name from the settlement A, on the islet in the middle of Lake Boian (near the Danube, district Ialomița, Wallachia), where it was first identified. This settlement was discovered during the investigations carried out, in the autumn of 1923, by Mr. R. Vulpe and myself, for the archaeological mapping of the region. The excavations took place in the summer of 1925 and were directed by Mr. V. Christescu, who published the results in *Dacia*, II, 1925, 'Les stations préhistoriques du lac de Boian,' pp. 249-303. The first station where methodical observations on stratigraphy allowed the excavator to state the relative chronology of this civilisation, in the context of the other neo-eneolithic balkano-danubian civilisations, was Glina (Wallachia, south of Bucarest), excavated by Mr. I. Nestor (cf. 'Zur Chronologie d. rumän. Steinkupferzeit,' in *P.Z.*, 1928, pp. 110-143; 'Fouilles de Glina,' in *Dacia*, III-IV, 1927-1932, pp. 226-252). The excavations from Atmagea (see above, note 2), from Vidra (cf. D. V. Rosetti, 'Săpăturile dela Vidra,' in *Publicatiile Muzeului Municipiului București*, I, 1934, pp. 6-60), and from Tangâru (cf. D. Berciu, 'Săpăturile arheologice dela Tangâru,' in *Buletinul Muzeului Jud. Vlasca*, I, 1935) confirmed the accuracy of this stratigraphy and of the said relative chronology; thus it is stated that, at least for the time being, the Boian A is the oldest of all neo-eneolithic balkano-danubian civilisations from the inferior Danube valley and from north-east Thrace. As for the absolute chronology, it cannot be examined here.

2. For the detailed analysis, see Nestor (*Zur Chronologie*, etc.) and Berciu (*op. cit.*).

3. As at Vidra (D. V. Rosetti, *op. cit.*, p. 8) and at Tangâru (D. Berciu, *op. cit.*). Moreover, no incised or grooved ware, with a deep layer of ochre paint applied over the designs, as in the Boian station (V. Christescu, *op. cit.*, Pl. XXII), was found.



another sherd there is a design—perhaps more intricate originally—from which only a series of slanting graphite lines and a circle reserved on the black slipped ground, by surrounding it with a heavy mass of graphite, are still preserved (Pl. I a, 2). It is thus possible to make a distinction between graphite *painted* ornament and negative ornament *reserved* on the slipped ground by a graphite outlining. Both processes are constantly met with in the other strata—II, III and IV—but there is a marked preference for the reserved ornament.

The ground on which such ornament is painted or reserved has a black slip, and the fragments with a yellowish-brown slip are exceedingly rare in this stratum.

In the scanty remains from the layer of rubbish between the first and second strata were found two pottery fragments with positive, graphite painted, ornament. The first presents only vertical lines and rectangular interspaces, painted on the brim of the vase; the other shows, on the fluted brim, a series of right and left slanting lines, between which is a wolf's tooth triangle, pointing downward (Pl. I a, 4).

This kind of decoration, coming from the oldest stratum at Atmagea,<sup>1</sup> cannot be thought to be based on the spiral and meander. It consists of plain geometrical elements, never really intricate, yet recurring in the next layers too. The few fragments found, though not very numerous or important, do allow us to point to the existence, as early as Boian A, or at least as early as the end of that phase, of some among the geometrical elements identified in the second stratum—of the 'Petru Rareș' type—at Tangâru (compare Fig. 22, Tangâru, right side, with Atmagea, Pl. I a, 4), which Mr. Berciu connected with the south.<sup>2</sup>

Lastly, it must be noted that the white paint that fills the incisions is also met with on some fragments of vases with flutings placed just under the brim, and on fragments with excised ornaments of the Boian A type (as in all similar stations).

As for the shapes of the vases on which such ornament occurred, the above-mentioned fragments seem to belong either to a kind of grooved tumbler, resembling the inverted truncated cone form, or to dishes with a horizontally-fluted brim. These forms are met with again

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1. We cannot attempt a comparison with the graphite pottery of the strata of Boian A type, from Vidra and Tangâru, both preliminary reports of the excavations in these settlements giving a description of the graphite painted pottery found in the said strata that is only summary.

2. *Op. cit.*, pp. 42-43.

in the other strata, and were preferred for painted ornament, though later this is found on other shapes as well.

II. In the second stratum (Gumelnița A 1),<sup>1</sup> the painted vases and sherds are still very infrequent, but they show more variety, since in addition to graphite painted pottery there are some ochre-painted vases in the crusted ware style.

For instance, at the bottom of that stratum there were some sherds decorated with incised bands: between two parallel spirals, enclosing a curling ribbon of unpolished ground, there was applied after the firing of the vase a matt red layer of ochre paint (crusted ware technique).<sup>2</sup> In the same place, on a fragment of a vase resembling the inverted truncated cone form—the Anau type<sup>3</sup> (Pl. I b, 3)—the ochre paint covered a spiral band and the incisions outlining it were filled with a white calcareous substance: thus the ochre ornaments were surrounded by interspaces reserved on the blackish slip.

Another ceramic fragment found in the same stratum showed the simultaneous use of the ochre and graphite: the ochre was applied, after the burnishing, in a wide strip of nearly 4 cm., on the interior brim; the graphite formed parallel bands, alternating horizontally with interspaces reserved on the black slipped ground. Between these alternate bands there are rows of wolf's teeth triangles; the downward-pointing ones are in graphite, the others, upward-pointing, are reserved. The workmanship indicates that here, too, we are in presence of a negative, reserved, ornamentation, rather than a positive, painted one. The form of the vase cannot be definitely determined (Pl. I b, 1). The same wolf's teeth reserved on a black slip with greenish lights, by means of matt grey graphite interspaces, recur on the upper half of an inverted

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1. Judging from all the material discovered in the second stratum at Atmagea, this stratum may be considered as belonging entirely, from the chronological standpoint, to the beginning phase of Gumelnița A (which was recently called Gumelnița A 1). Although it is not possible to enter here into further details, we must say that the subdivision of the phase A into A 1 and A 2 has, for us, a nearly exclusively stratigraphic value, and consequently one of chronological succession; for the differences of style between the two strata belonging to the Gumelnița A phase are as yet insufficient to justify the division of this phase into two stylistic phases.

2. It must be noticed that at the same level a nearly intact figurine was also found, painted with red ochre on the whole ornamented surface; the incisions were filled with a white calcareous substance, and the interspaces covered with ochre. On the unornamented part no paint was applied.

3. These vases were first connected with the similar ones from Anau, by Prof. O. Menghin (cf. 'Die Herkunft der bulgarischen Steckdosen,' in *Götze-Festschrift*, 1925, pp. 77-83).



truncated cone vase, whose lower half is adorned with incised lines (Pl. I b, 2). The wide ridge that marks the transition from the upper to the lower profile is also decorated with graphite lines and upright rectangles. Finally, it is to be remarked that in this stratum there is an ever-increasing number of dishes found with lids, whose straight rims are cut by two or three horizontal flutings, filled with calcareous white; which colour, applied after the firing of the vase, helps only to outline the design without being a design in itself. In fact, there are never white designs: this colour, playing an even more secondary part than the ochre red, is used only to accentuate the incisions and flutings placed under the rim. This statement is equally valid for all strata and phases of the Gumelnița civilisation.

The ochre decoration in the crusted ware technique, though met with at Atmagea-Tătărasă only in the second stratum (=Gumelnița A 1), occurs in other settlements<sup>1</sup> from the Boian A stratum downwards. Nevertheless, it is not possible to draw any inference from the fact that during our excavations at Atmagea the lowest stratum did not yield ochre-painted crusted ware, because the spots where the excavation could go down to the first stratum (Boian A) were rare enough. It is noteworthy that the crusted ware technique lasts from the Boian A into the Gumelnița A civilisation, in which, however, in most settlements, it has only a minor part, compared with the graphite painting.<sup>2</sup>

As for the ochre and white incrustations of the grooved and incised ornaments, it must be recalled that this technique (being in fact only incrusting, not painting) has long been known in the Boian A as well as in the Gumelnița civilisation (older strata, A 1 and A 2).<sup>3</sup>

III. Yet, the stratum where painted designs (here exclusively graphite painted) are more numerous and show more variety, is the third stratum, corresponding to the Gumelnița A phase (Gumelnița A 2).<sup>4</sup>

1. Vidra, *loc. cit.*; Tangăru, *loc. cit.*

2. At Cernavoda the white and red ochre paint is extremely abundant (cf. C. Schuchhardt, 'Cernavoda,' etc., in *P.Z.*, 1924, pp. 9-27; cf. also A. Langsdorff and I. Nestor, 'Nachtrag zu Cernavoda,' in *P.Z.*, 1929, pp. 200-229).

3. No special references are needed, since nearly all settlements belonging to that civilisation ought to be cited. On the other side, if we refer less frequently to the material of the similar stations from Bulgaria, this is owing to the fact that earlier excavations were not always carried out there with the strict observance of the stratigraphic method.

4. In the section B, excavated at Atmagea, and chiefly in the prolongation ditch towards the north-east, at certain points two superimposed layers of burnt wattle and daub were found embodied in the same general stratum III (=Gumelnița A 2). The material from both burnt-wattle layers is identical, and neither the stratigraphical conditions nor the finds could justify their division into two strata of different civilisa-

From the very bottom of that stratum—at the point where remains belonging to it are sometimes in contact with those from the second layer—up to the superior limit of that culture stratum—that is, to the bottom of the next stratum (IV)—numerous vases and sherds with graphite designs were discovered.

This graphite paint was applied doubtless with a paint-brush,<sup>1</sup> before the burnishing of the vases but after the surface had been slipped,<sup>2</sup> but it seems that it was only the inner surface, the inside of the wide-mouthed vessels, that it covered entirely, for the external paint is limited, as was stated above, to a band on the brim or on the upper half of the vase. The sherds showing traces of graphite paint on large surfaces are scarce.

Since it is not possible to give a detailed description of every piece of graphite painted ware—the number being too great—only the most characteristic ornamental motives will be described.

In view of what is stated above about the peculiar circumstances of the third phase from the surface *B* (see note 7), we begin the analysis of the graphite designs from the third stratum with those occurring on the rare sherds found at the bottom (at a small distance above the remains of the second stratum).

Nearly all these designs are reserved on the ground by outlining the patterns in graphite: designs with triangles (Pl. II a, no. 2; Pl. II b, no. 1), or ellipses (Pl. II a, no. 3), are thus obtained on the brown or blackish slipped ground. In both cases there are also narrow reserved strips completing the motive. On the inner brim of a dish (Pl. II a, 1) several groups of three wolf's teeth each fit into the reserved ones between them. The interior surface of the dish is covered with a crowd of patterns, reserved lozenges, circles and curling spiral bands, the painted (positive) lines being there only to outline the designs. On the exterior part of the brim, the same dish shows positive lines and reserved semicircles. A similar curling spiral is reserved on the

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tions. The more so as in the other excavated sections at Atmagea there is at the same level only a single burnt-wattle layer, which forms, together with other remains, the third stratum.

1. Cf. Langsdorff und Nestor, *op. cit.*, p. 227, note 65.

2. It is only in that stratum that sherds with a brown or yellowish slipped ground become more frequent, while in the second stratum they were very scarce, and even more so in the first stratum. This proves that in the oldest phase a black slip, on which designs were painted or reserved, was in use, which gradually gave way before the brown, yellowish, or other slip; as the latter become more numerous, the instances of black slipped ground are more infrequently met with.



inner surface of another dish (Pl. II b, 2). It is, however, impossible to establish whether on the fragment no. 1, Pl. II b, there is a positive or a negative design, the more so as on the fragment no. 4, Pl. II a, there are evident traces of positive designs. But it is at any rate certain that negative designs are prevalent here.

In the same third stratum, towards its central and upper part, the graphite painted designs present a greater diversity: if the essential elements remain unchanged, at least the patterns resulting from their different combinations are new.

The positive wolf's teeth, working into the negative ones (Pl. III a, no. 7), as well as the reserved triangles (Pl. II b, no. 5; Pl. III b, no. 2), accompanied by reserved oblique strips, so narrow as to be almost filiform (Pl. II b, no. 5; Pl. I a, nos. 4, 5 and 7; Pl. III b, no. 7), are most common. The reserved circles and ellipses are rather numerous too (Pl. II b, no. 3; Pl. III a, nos. 3, 4, 5 and 7; Pl. III b, no. 7), and so are the curling bands and the spiral crooks, equally negative (Pl. II b, no. 4).<sup>1</sup>

On the upper part of certain high-brimmed dishes a large, zigzag band, painted in graphite, marks out on the polished ground one series of reserved wolf's teeth, pointing downward, clinging, so to speak, to the brim, and another series, pointing upward (Pl. III b, nos. 1 and 3).<sup>2</sup>

Wide graphite bands, belonging to a rather complex ornamental system, which, owing to the insufficiency of the extant instances, cannot be studied here, are met with on fragments of large vases (lids? —Pl. IV b, no. 3), and recall perfectly other similar designs from the area of the same civilisation.<sup>3</sup>

Yet, in addition to these ornamental motives which, though essentially similar, show a certain variation every time they recur, there are three distinct ornamental friezes repeatedly met with (two of them very often indeed, the third less frequently).

In the first place, there is the frieze decorating the high brim of some vases, the form of which is midway between dishes and vases of

1. Designs most common in the area of the Gumelnița civilisation; consequently we shall give no special reference.

2. This exceedingly simple design recalls at first sight the ornamentation seen on a painted vase, of the 'degenerate Cucuteni B style' from Monteoru (vase as yet unpublished, in the National Museum of Antiquities, inv. no. 5447, and found during the excavations of Prof. I. Andrieșescu). Of course, this refers to the design not the technique, for the vase from Monteoru is painted a dark brown on a yellowish chestnut slip, while at Atmagea the vase has only graphite painted bands.

3. For instance, at Kodjadermen, in Bulgaria; cf. 'Izvestia,' *Bulletin de la Soc.*, VI (1916-1918), Pl. VI, nos. 5-6, and so on.

the inverted truncated cone form; it consists of circles, semicircles, narrow slanting bands, etc., the whole being reserved on the slipped ground by painting the interspaces with graphite (Pl. IV a, nos. 1-4). The said frieze does bear a distinct resemblance to the similar ones met with in the area of the Cucuteni *B* civilisation.<sup>1</sup> Occasionally there occur among the other elements of this frieze some groups of graphite painted curved lines (positive), and reserved (negative) triangles, the system remaining unchanged (Pl. IV a, no. 5).

A second frieze, often met with on the brim of large dishes, is formed by a zigzag line enclosed between two parallel graphite lines, so that two rows of wolf's teeth are reserved on the slipped ground (Pl. IV b, nos. 1 and 2).

The third ornamental motive, found several times on the high brim of certain vases of the inverted truncated cone form (the Anau type), and sometimes placed under other designs, is constituted by elements simple enough in themselves yet so disposed as to make the resulting pattern seem rather intricate. By means of combined bands and parallel lines, slanting some to the right, others to the left, a series of triangles hanging on to stalk-like lines are reserved on the slipped ground (Pl. V a, nos. 3 and 4). The same decorative system produces a positive pattern, if instead of the graphite bands there are several groups of three parallel and slanting lines, graphite painted, springing from the tail that sticks out from the triangle, which in this case are also positive (painted) (Pl. V a, no. 2).<sup>2</sup> It is a most striking ornamental pattern, especially when it unfolds itself on the whole upper half of a rather high vase.

Two ornamental bands may be connected with the first of the above-mentioned friezes: the positive ornament, a spiral made of graphite painted lines, is entirely (Pl. V a, no. 1), or nearly entirely (Pl. IV a, no. 1), enclosed in the limits of a band, which decorative system is closely related to many others met with on the painted dishes of the Cucuteni *B* type.<sup>3</sup> These two bands are the only instances of complete spiral in the painted decoration at Atmagea.

It must be noticed here that no ochre-incrusted sherds were dis-

1. See, as a characteristic example, H. Schmidt, *Cucuteni*, Pl. 20, no. 1 b, the frieze unfolding on a dish-brim, where only the vertical lines and the shield-like ellipses (formerly circles) are elements a little different from those met with at Atmagea.

2. In fact, this design, painted on the exterior brim of a high dish, is executed in such manner as to make one think the potter used a stencil larger than the space reserved for the designs, and thus the lower part of the spiral was not painted for want of space.

3. Cf. Hubert Schmidt, *op. cit.*, Pl. 15, etc.



covered in this stratum; but, on the other hand, fragments of vases with horizontal flutings placed below the brim and filled with calcareous white do occur.

The forms showing graphite designs are more varied in this third stratum. Besides the two shapes already met with in the other strata, namely, the inverted truncated cone (Pl. V b, nos. 1 and 2) and the simple dish (Pl. V b, no. 8), large-rimmed dishes appear (Pl. V b, no. 4), also a shape that contains something of these and of the flat and wide truncated cone form (Pl. V b, no. 3); some piriform vases with outstretched shoulders and very low brim (Pl. V b, nos. 5 and 6), and finally many lids (Pl. V b, no. 7).

IV. There is little to say about the few sherds yielded by the fourth stratum (=Gumelnița B). These scanty fragments, found exclusively at the bottom, were decorated with motives formed by parallel slanting lines in graphite (positive) and reserved (negative) curls.<sup>1</sup>

Before putting forward such general conclusions as may be drawn from the foregoing study of the painted decoration from Atmăgea, we think a few further considerations about the painting technique used in that settlement will not be superfluous.

The ware—hand-made, as is all the eneolithic pottery from Atmăgea—on which the graphite designs were painted or reserved, had always been polished before being painted, and showed a slip of the same

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1. In the upper part of this culture stratum no fragments with graphite ornaments were found, which may signify that painted decoration was only used during the beginning period of the last stratum of the Gumelnița type. The problem of the persistence of painted ornaments in the Gumelnița B stratum is not yet entirely elucidated. Our first impression of the absence of painting during the phase Gumelnița B (cf. Vladimir Dumitrescu, 'Fouilles de Gumelnița,' *loc. cit.*, p. 72) was proved questionable, after the removal of the calcareous crust from certain vases belonging *probably* to that stratum (cf. Vladimir Dumitrescu, 'A propos de la peinture de quelques vases de Gumelnița,' *loc. cit.*). Subsequently, however, at Jilava, in a particularly rich ceramic complex, appertaining certainly to Gumelnița B, only two fragments with very poor graphite ornaments were discovered. At Vidra, on the contrary, in the stratum IIc (=Gumelnița B), positive graphite ornaments were found (D. V. Rosetti, *Săpăturile dela Vidra*, p. 26); at Tangâru, too, *positive* graphite painted ornaments are met with in the stratum IIIc, corresponding to the Gumelnița B phase (D. Berciu, *op. cit.*, p. 31). Mr. Nestor was the first to express his doubts about the existence of a phase Gumelnița B lacking in graphite ornaments and plainly distinct from Gumelnița A (cf. *Zur Chronologie*, *loc. cit.*). Still, from the stratigraphic point of view, and because of many characteristic features which we cannot examine here, the existence of the phase B at Gumelnița is beyond doubt. As for the shapes of the vases on which painted ornaments occur in the fourth stratum at Atmăgea, owing to the insignificance of the fragments discovered, we cannot furnish many valid indications: the dishes and piriform, broad-shouldered vases were, however, identified. It may be remembered here that such piriform vases with projecting shoulders were not found in the lowest stratum at Atmăgea (I=Boian A), their presence being signalled only in the strata of the Gumelnița type.

colour as the original clay: black, brown, and a yellowish orange. On that slip, and always before the firing of the vases, negative designs were reserved by outlines in graphite, and positive designs were painted also with graphite. On the other hand, the ochre-painted designs in the crusted ware technique were executed after the burnishing, on the rough unpolished ground, left so precisely in order to make the flowing mass of paint more adherent.

A curious accident happened to the graphite painted ware, when partially or totally calcinated during the fire that destroyed the respective settlements; on the deeper calcined side, longer exposed to the flames, the graphite utterly lost its metallic lustre and took a dull whitish shade, while the polished ground also lost its slip, becoming a matt brick-red. On certain vases one can easily follow the gradual change of the graphite band from the metallic gray to the dull white on the burnt and deformed portion (Pl. IV a, nos. 2-4).

It is to be remarked here, too, that the decoration is monochrome—that is to say, a single colour was used for the *designs*; the result naturally is a bi-colour effect, since the colour of the ground is different from that of the graphite or ochre of the patterns. There are only three different colours when the incisions outlining the ochre bands were filled with white paste. Otherwise, there can be no question of real trichrome or polychrome designs.

The painted pottery from Atmagea—which in general is rather modest compared with that found in other similar stations in our country (Cernavodă), or in Bulgaria (Kodjadermen, Denev)—cannot pretend to a special place in the belt of the Boian *A* and Gumelnița balkano-danubian civilisation. But the study of its decoration may occasionally furnish an opportunity for a summary review of the problems raised by the painted pottery of this region.

If our provisional conclusions about the painted pottery from the older phase at Atmagea (I=Boian *A*) is confirmed by further finds, as well as by the material already discovered at some stations but of which we have as yet only preliminary, necessarily summary, accounts, then a most important point will have been settled: namely, that the graphite painted pottery from the Boian *A* stratum (and consequently civilisation) has a strictly geometrical decoration; meander and spiral are entirely absent: not a single element belonging to the spiral-



meander system was found in that stratum, the reserved circle seen on the fragment (Pl. I a, no. 2) not being related to any spiral ornament.

On the other hand, during this preliminary phase there are only linear designs, not yet real banded patterns. To be sure, we refer only to the graphite painting, which is all that we have identified in the first stratum (Boian A) at Atmagea, because the white painting in the crusted ware technique was found in peculiar circumstances.

Considering that in the two styles which are the capital characteristic of the Boian A civilisation—namely, the grooved and the incised pottery<sup>1</sup>—the favourite motives are the meander, for the former, and the spiral, for the latter,<sup>2</sup> it is evident that *their absence* from the graphite painted pottery of this stratum *cannot be fortuitous*. The presence of the meander, and even of spiral designs painted in the crusted ware style, which is a wholly different technique (yet similar to the one used in the third Thessalian period),<sup>3</sup> does not affect our statement. For, if it is proved that in Boian A the graphite paint, *applied before the firing* of the vase, is in no way connected with the spiral-meander designs, then the hypothesis that graphite painted decoration is originally foreign to the rest of the Boian A civilisation, becomes highly probable. Whether this decoration should be linked with the neolithic painted pottery of Greece—as Mr. Berciu proposed to link the graphite painted pottery of the second stratum at Tangâru<sup>4</sup>—this can be affirmed only after the discovery of a sufficient number of graphite painted vases or sherds of the Boian A civilisation. All we can certainly say is that this painted decoration comes neither from Central Europe, nor even from the belt of Cucuteni-Tripolje painted pottery: the motives, as well as the ornamental system, are different.<sup>5</sup>

1. Cf. I. Nestor, *Zur Chronologie*, p. 114.

2. *Ibid.*, pp. 118-119; D. Berciu, *op. cit.*, p. 16.

3. G. Childe, *The Dawn of European Civilization*, 2nd ed., p. 178.

4. *Op. cit.*, pp. 42-43.

5. It is now no longer possible to assert, as G. Childe formerly did (*op. cit.*), that the graphite painted pottery from the balkano-danubian region was the result of the southward migration of the Cucuteni people. Moreover, it appears from the important discovery Mr. R. Vulpe made in the settlement of Izvoarele, Moldavia (report at the Congress of Oslo, to be published in the *E.S.A.*, XI), that even on stratigraphical grounds the origins of the graphite painted pottery of the balkano-danubian civilisations, Boian A and Gumelnița A, cannot be sought in the Cucutenian pottery. The finds of Mr. Vulpe, in the *pre-cucutenian* stratum at Izvoarele, allow us, we think, to assert that it is by no means possible to ascribe to the beginning of Cucuteni A an earlier date than that of the beginning of the Gumelnița A civilisation. It is likely that both civilisations arose at about the same time, and it is even possible that, contrary to the opinion professed until lately by all authorities and by ourselves, the Gumelnița A civilisation existed *before* Cucuteni A, even if the former lasted on to a later date than the latter.

That does not mean that the Cucuteni-Tripolje painted pottery proceeds originally from the crusted ware of Boian A, as asserted by Mr. Berciu.<sup>1</sup> The painted decoration of the oldest phase (A) at Cucuteni has no connexion whatever with the crusted ware technique of the Boian A culture.

Returning to the painted pottery from Atmagea, we remark that in the second level (=Gumelnița A 1) the graphite painted pottery presents the same geometrical motives, different both from the meander and the spiral. At the same time there comes into use the crusted ware (Pl. I b, no. 3), with painted spiral motives, which technique has already been met with, as stated above, even in the Boian A civilisation, in other settlements.

It is only among the remains at the bottom of the third stratum at Atmagea (=Gumelnița A 2) that the first instance of a painted spiral band is found. Yet, even there, the spiral is met with in company with wolf's teeth, rectangles, and lozenges on the selfsame vase (Pl. II a, no. 1). The other sherds, too, from the bottom of this third level are adorned with geometrical, but not with spiral, designs. The meander is totally wanting on all painted vases and sherds from this stratum. The spiral band with curl-shaped end (Pl. II b, no. 2), most common in the other stations belonging to the Gumelnița civilisation, and the spiral lines decorating the high dishes, are rather scarce here. Beside them the strictly geometrical designs persist. Moreover, it must be noticed that the triangle hanging on a slanting stick seems to be only the painted reproduction of an ancient design, used in the Boian A civilisation (in the grooved technique).<sup>2</sup>

No further conclusions can be profitably drawn, as yet, from the study of painted decoration on the pottery at Atmagea. When all the similar material from Vidra, Tangâru, and Petru Rareș has been fully described, it will be seen to what extent the graphite painted pottery, and the white and ochre-painted crusted ware from the area of the Boian A and Gumelnița civilisations, may modify current opinions about the origin of painted pottery in the south-east of Europe. Therefore, we think it is preferable, for the time being, to close our study here, hoping that subsequent excavations may bring forth some still unknown stages in the making and evolution of the neo-eneolithic balkano-danubian civilisations.

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1. *Op. cit.*, pp. 43-44.

2. Cf. *Săpăturile dela Vidra*, p. 13, fig. 7, the lower part of the vase.

## STUDIES IN ARCHAIC GREEK CHRONOLOGY

### II. *Ephesus* \*

BY EINAR GJERSTAD

THE finds from the Archaic Artemisia in Ephesus have formed a subject of archaeological discussion since they were discovered and published by Hogarth in 1908<sup>1</sup>; and this is very natural on account of both their artistic quality and their importance for Archaic Greek chronology. In the present paper I shall only discuss the chronological question raised by the finds. Various opinions have been expressed on this point, and there is a considerable discrepancy between the opinion of Hogarth and others who consider the earliest remains to date c. 700 B.C., or even from the end of the eighth century B.C.,<sup>2</sup> and that of Löwy, who assigns them at the utmost to shortly before 550 B.C.<sup>3</sup>

As the dating of the finds is dependent on the interpretation of the architectural remains and stratigraphic conditions, I shall start with an examination of these on the basis of the facts given in the excavation report of Hogarth; such an examination is so much the more necessary as Hogarth's interpretation of the architectural remains brought to light by the excavation has been subjected to severe criticism by Löwy in the paper referred to above (cf. below, p. 23 f.).

It is well known that Hogarth distinguishes three successive temples—called A, B, C—below the level of a fourth temple, called D, which can be identified with certainty as being that for which Croesus dedicated the columns mentioned by Herodotus.<sup>4</sup> As the finds to be dated belong to the temples A-C, we are here chiefly concerned with these.

The site of the Artemision was originally a marshy delta formed by the alluvium of two tributaries of the river Cayster. This alluvium

\* Part I of these studies was published in this journal, vol. XXI, pp. 67 ff.

1. Hogarth, D., *Excavations at Ephesus*, London, 1908.

2. Hogarth, *op. cit.*, pp. 239 ff. Poulsen, Fr., *Der Orient und die frühgriechische Kunst*, Berlin-Leipzig, 1912, pp. 100 ff.

3. Löwy, E., *Zur Chronologie der frühgriechischen Kunst* (Sitzungsberichte, Bd. 213, Abh. 4, Akademie der Wissenschaften, Wien, Phil.-hist. Klasse, 1932).

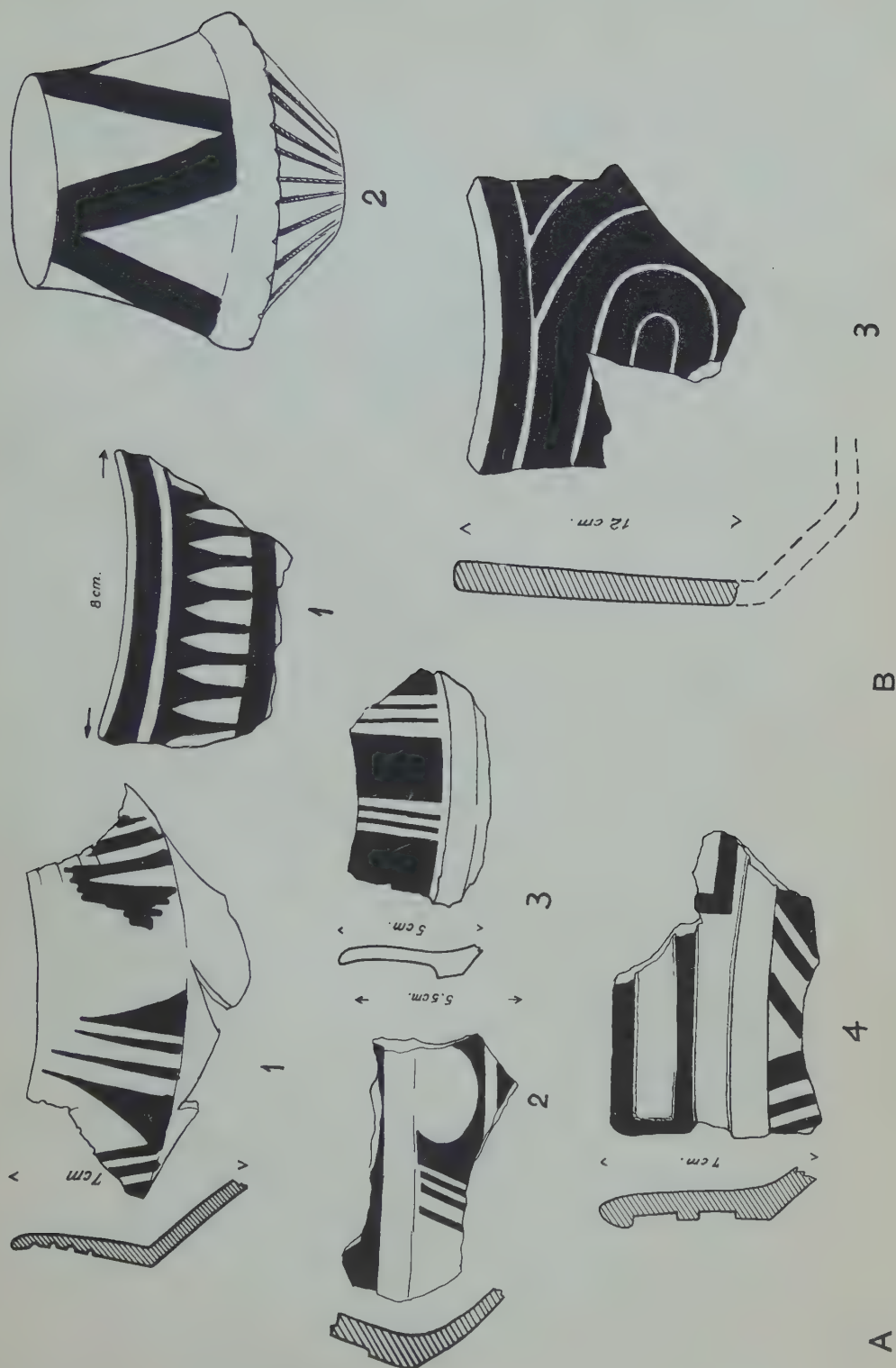
4. Herodotus, I, 92.



consists of fine, saturated river-sand. The surface of the bottom sand is at level  $-5.10$  m.

The chief structure of Temple A is the so-called Central Basis. This is rectangular in shape and measures  $4.34$  m. in length and  $2.86$  m. in width. The preserved height is  $1.50$  m. It is built of well-cut and carefully joined blocks of greenish schist which rest on a foundation of yellow limestone slabs bedded on the river-sand. The faces of the basis walls are extremely carefully smoothed from the top course and down to the foundation, so that there can be no doubt that these walls were visible from top to bottom. It may therefore be inferred that the floor-level of Temple A was not higher than about  $4.70$  m. below the levelling datum (Hogarth, *op. cit.*, p. 53). On their inner surface the blocks of the basis are only roughly shaped, and the interior of the basis was filled with fragments of laminated, yellow limestone, as well as earth, which contained a great number of *ex votos*, mainly in precious metals (cf. p. 28), together with fragments of bones which were probably remains of sacrifices. This filling must therefore have been thrown in contemporarily with the erection of the basis. The *ex votos* found in the filling are to be interpreted as foundation offerings and the basis itself seems to have been a podium supporting the cult object, as suggested by Hogarth. It is worthy of notice that the east, north, and south walls of the basis were found in a rather ruinous state—on the east side only one course of blocks was preserved above the foundations. This fact is of a certain importance for the following discussion (p. 26 f.).

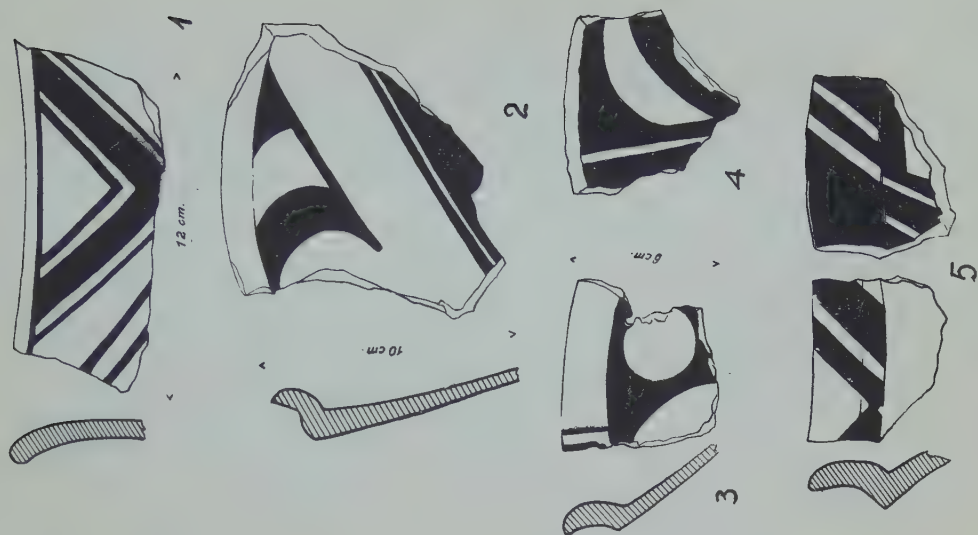
Another structure which can be assigned to Temple A is a T-shaped platform built of blocks of roughly coursed, laminated limestone. The head of the T measures  $2.82$  m. and the stem  $1.66$  m. in width, and the entire length of the platform is  $2.88$  m. It extends to the W. of the basis, and its lower courses are continued through the W. basis wall, replacing its lower course of schist blocks and ending with a rough edge just inside the W. basis wall. Along the W. face of the basis the platform is built over by upper courses of blocks forming a step, which abuts on the second course of schist blocks of the exterior face of the basis wall. The blocks of the platform are bonded throughout, showing that it was constructed in one piece. It rests on the same foundation of limestone as the basis walls, this foundation extending as a continuous bed below the basis walls and the platform. These facts afford unquestionable evidence that the basis and the platform were planned



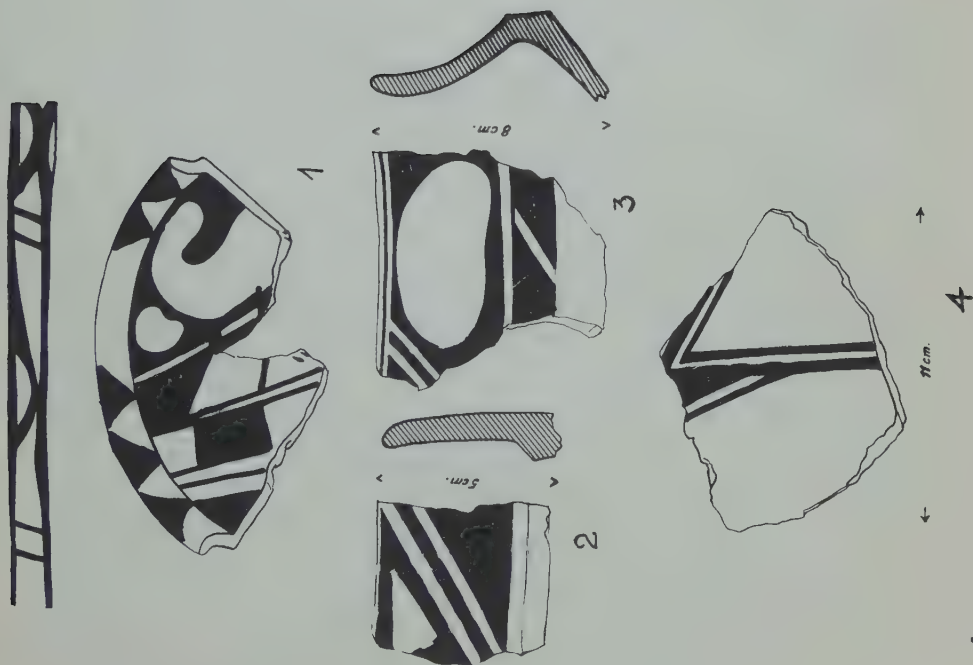
PAINTED POTTERY, NEOLITHIC AGE, RUMANIA.







B

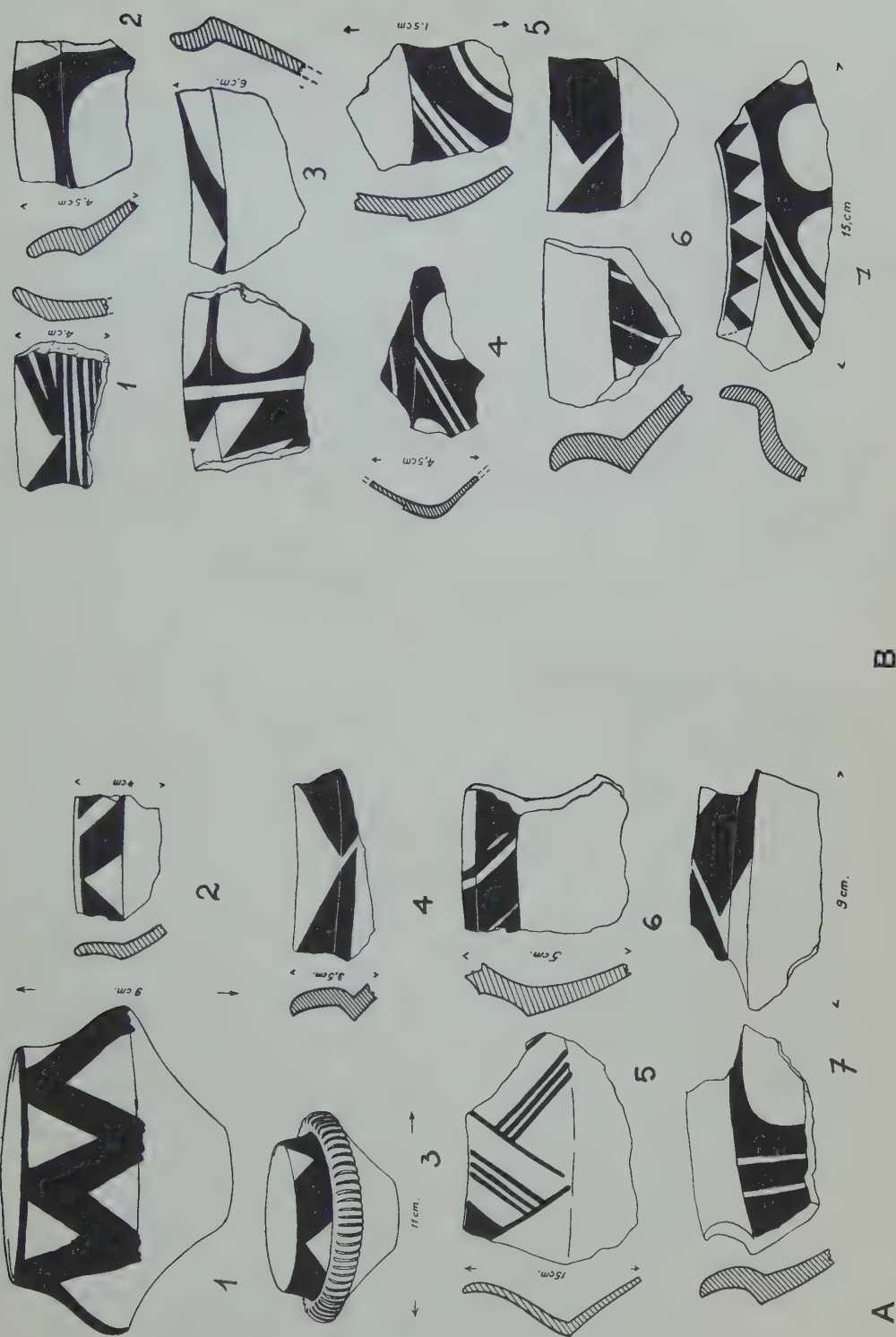


A

PAINTED POTTERY, NEOLITHIC AGE, RUMANIA.



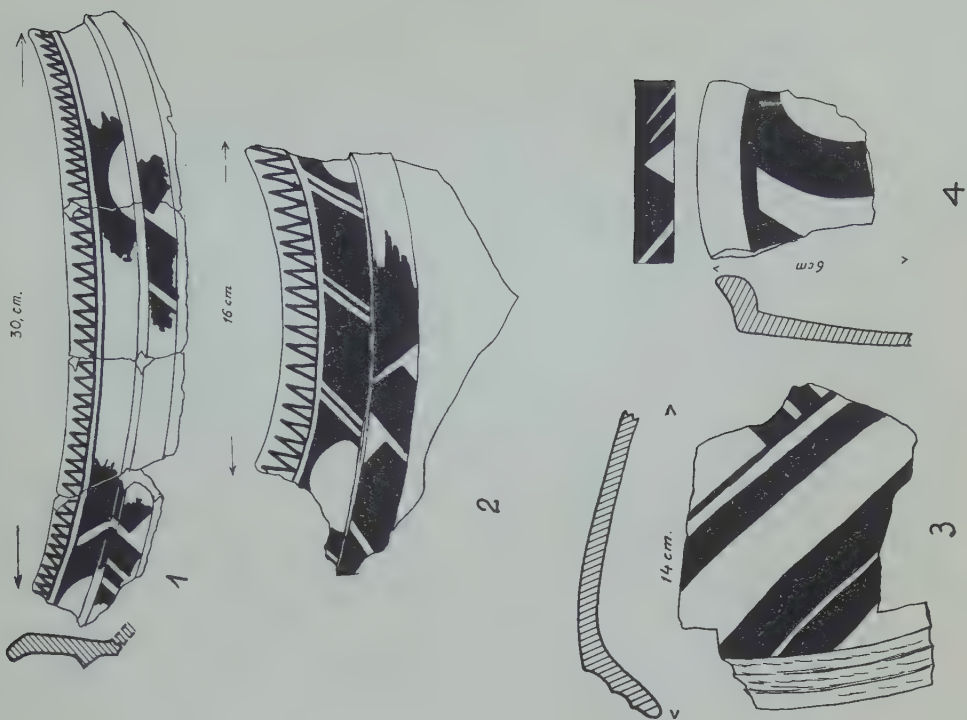




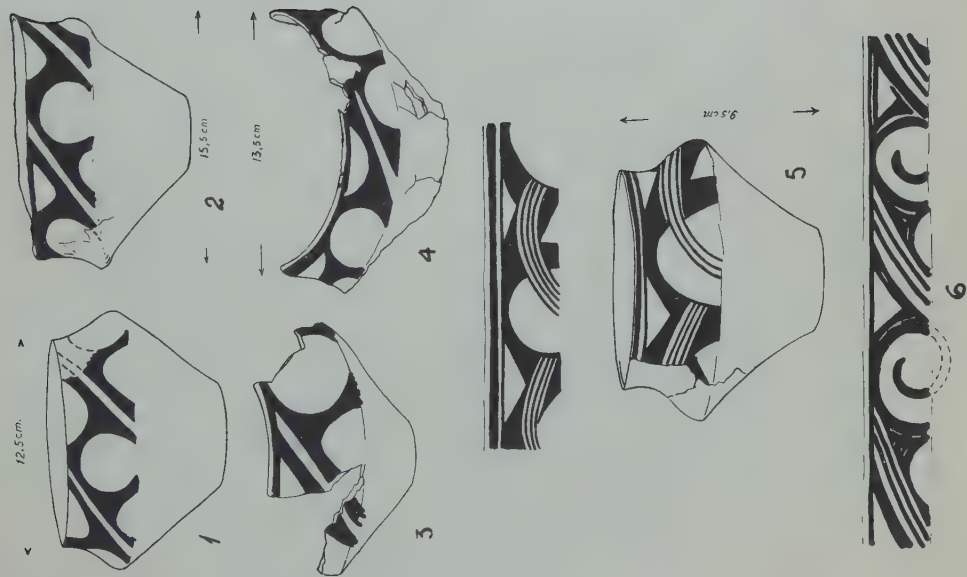
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B

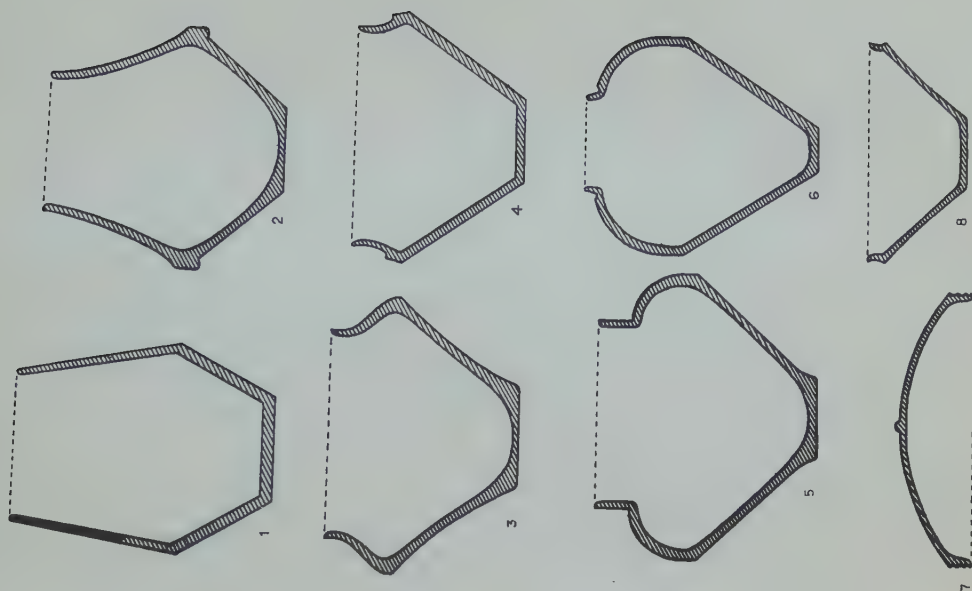


A

PAINTED POTTERY, NEOLITHIC AGE, ROMANIA.

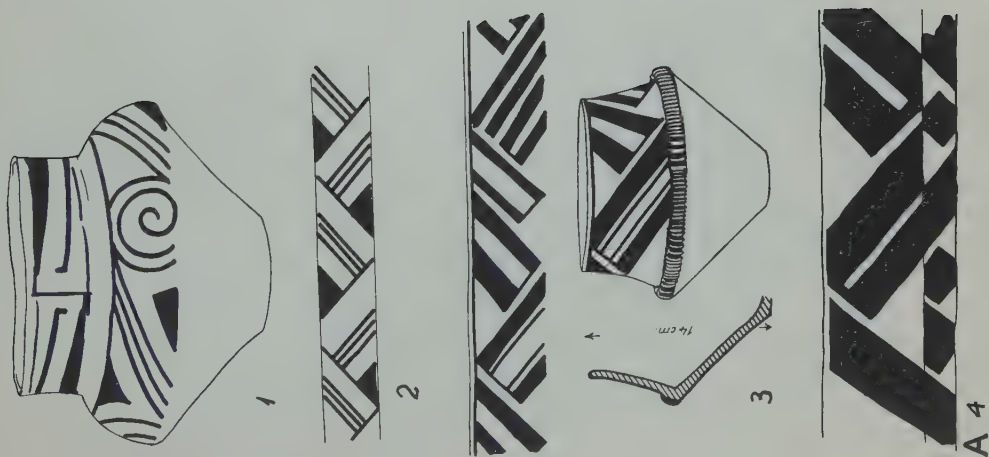






B

PAINTED POTTERY, NEOLITHIC AGE, RUMANIA.



A 4





in one piece and erected contemporaneously. The stepped part of the platform reaches the level  $-4.29$  m. and the highest preserved surface of the remaining part of the platform the level  $-4.43$  m., and thus it was at least  $0.27$  m. above the floor-level of Temple A.

A third structure belonging to the same temple is another rectangular platform, which abuts on the W. side of the T-shaped platform. It measures  $4.45 \times 2.76$  m., and is, like the T-shaped platform, built exactly on the axial line of the basis. Its edges are of the same material and construction as the T-shaped platform, but the interior was filled with clay and small, flattish stones. Its highest preserved part reaches the level of  $-4.22$  m.; its foundation level is somewhat irregular but is never above  $-4.85$  m. This rectangular platform must, on the one hand, be earlier than Temple B, because it was enclosed and covered by the enlarged basis of that temple (cf. p. 18); on the other hand, it cannot be earlier than the basis of Temple A because it starts only  $0.15$  m. below the floor-level of Temple A and, moreover, some finds (electrum coins and gold beads) in the interior filling of the platform are of the same types as those in the basis and other A-strata (Hogarth, *op. cit.*, pp. 57, 75, 233). The rectangular platform must therefore belong to Temple A. Its identical construction with the T-shaped platform and the coincidence of its axial line with that of the T-shaped platform and the basis, while it differs from that of the subsequent temples (cf. p. 18), point in the same direction. The objections to this evidence are entirely inconclusive (cf. p. 23).

It seems certain that these structures occupied the centre of an open temenos, surrounded by a peribolos wall of which Hogarth thinks he found some scanty remains, but he admits himself that they are not conclusive (*op. cit.*, p. 56).

After some time rebuildings and enlargements took place, and these are called Temple B by Hogarth.

It was pointed out above that the east, north, and south sides of the basis had collapsed to a great extent, probably owing to a subsidence. The damaged faces of the basis were repaired with limestone slabs laid flush with the schist blocks of the original walls, and the basis was enlarged by the erection of revetting walls along its north, east, and south faces; these walls were prolonged to the W. and joined by a transverse wall so that the basis and the T-shaped and rectangular platforms were united into one rectangular block, measuring  $10.70$  m. in length

and 6.40 m. in width. These new walls were not built of green schist blocks but of small blocks of yellow limestone, the same material as was used for the restored parts of the original walls of the basis. The blocks are well dressed on the outside but their inner surface is only roughly worked. The walls start at level  $-4.85$  m. or  $-4.90$  m. from a substructure of the same material as the walls themselves. The narrow interspaces between the old and new basis walls were filled with sand and limestone slabs, between the extended walls and the rectangular platform they were filled with rubble, and between these latter walls and the T-shaped platform with a less solid filling of debris.

The axial direction of this enlarged basis does not coincide with that of Temple A but runs somewhat E.S.E. of it.

The floor-level of the east part of the enlarged basis—*i.e.* the area of the original basis—is fixed by Hogarth to level  $-3.52$  m. on the evidence of some remains of a flooring of yellow limestone slabs at that level (Hogarth, *op. cit.*, p. 60). It is, however, to be observed that these limestone slabs do not extend only over the basis walls of Temple B but those of Temple C also, while they in turn are built over by the subsequent additions of Temple D, as shown by Section A-B, Plate II, in Hogarth's publication (cf. p. 20 f.). It is therefore necessary to assign this paving to Temple C, but it seems very likely that the basis floor of Temple B was at the same or approximately the same level, and the floor slabs overlying the walls of Temple C may very well be only a subsequent extension of the earlier floor of Temple B. On one of the paving slabs there are 'setting-out' marks indicating that something had been erected on it, probably the cult-object, as suggested by Hogarth.

The floor-level within the western part of the enlarged basis cannot be determined with certainty either, but Hogarth fixes the floor-level at about  $-4.43$  m. on the evidence of some fragments of carefully worked and smoothed limestone slabs which were found at this level overlying the western, transverse wall of the enlarged basis (*op. cit.*, p. 61) and may be remains of a pavement. This seems improbable, because the surface of the rectangular platform close to these limestone slabs reaches a level of  $-4.36$  m. and its highest point lies at  $-4.22$  m. (cf. p. 17), and is thus above the level of the supposed pavement. From this it seems inevitable to conclude that the pavement of the western part of the basis must have been at a somewhat higher level

than  $-4.22$  m. If the limestone slabs referred to are remains of a pavement their level may indicate that of the surrounding temenos, which Hogarth himself suggests may have been at about that level (*op. cit.*, p. 63). In any case the temenos floor cannot have been lower than  $-4.50$  m., as some parts of the walls of Temple B exist up to that level. In consequence of the above argument it seems likely, therefore, that there was a stepped approach from the level of the temenos pavement to the slightly elevated western part of the basis, which formed a low podium in front of the eastern part of the basis which supported the cult object and rose to a level of about  $-3.52$  m.

Apart from this enlarged basis there are other structures belonging to Temple B. Outside the basis of that temple there are three groups of parallel or approximately parallel walls. The innermost of these forms a revetment of the basis of B, and its north and south walls are continued to the W. of the western end of that basis, enclosing a new and further enlarged basis. On the one hand, therefore, this third basis must be later than Temple B; on the other hand, its walls are partly built over by walls of Temple D (cf. below). Thus it can be assigned to Temple C. The other two groups form two rectangles of walls running parallel to the basis at a short distance from it. The walls of the one rectangle are partly built over by those of the other. These latter walls must be earlier than Temple D, since they are partly built over by the structures of that temple; the former walls must be later than Temple A, since they are founded between levels  $-4.70$  m. and  $-4.50$  m., *i.e.* above the floor-level of that temple: hence it is evident that the walls in question must be assigned to Temples B and C respectively.

The walls thus assigned to Temple B enclose a passage about  $0.78$  m. wide to the N. and S. and  $1.45$  m. wide to the E. of the basis. The whole area enclosed by this exterior rectangle has an internal width of about  $8.00$  m. and a length of  $16.50$  m. The proportion of these measurements induces Hogarth to interpret the walls as foundations of a Hellenic cella. The walls, however, are too insecurely founded, only slightly below the floor-level of the temenos (cf. above), and too badly constructed to support the pressure of a roofed structure, and it is therefore more probable that they only formed a *sekos* around the basis.

We now turn to the second restoration and enlargement of the



Artemision, called Temple C. Some of its structures have already been analysed and assigned to this temple, above, p. 19. We have seen that a new sekos wall was built partly on top of the earlier one, Temple B, and we have also seen that the basis was enlarged by the erection of new walls revetting those of Basis B, and continued further to the W., enclosing a rectangular area in front of the earlier basis. Owing to this amplification the basis attained a length of 15·10 m. and a width of 8·60 m. There is also reason to believe that a wall was built across the basis, joining its N. and S. faces and revetting the west schist wall of the original basis, on the following grounds: the basis walls of Temple B are cut off flush with the west schist wall as if a wall had been erected there, and, as a matter of fact, there are some remains of the foundations of a wall along the schist wall and across the B foundations, but its superstructure has been entirely destroyed (Hogarth, *op. cit.*, p. 65). The walls are of similar material and construction to those of B, but they are laid higher up in the debris or from level -4·50 m. to -4·70 m., while the corresponding B walls are laid at about level -4·85 m. to -4·90 m., as stated above. The central part of the east wall of the basis seems to have been restored, since the courses of blocks show an irregular construction, have straight joints, and a rough exterior face. Furthermore, there is a crack in the restored part of the wall apparently caused by a settlement. At level -3·52 m. there are remains of a wall laid on top of the paving of stone slabs which overlie the walls of both Bases B and C and mark the floor-level of Basis C and probably also that of Basis B (cf. above, p. 18). The fact that the upper wall is laid upon a paving of Period C indicates that it is a subsequent structure, and Hogarth seems to be right in assigning it to Temple D, *i.e.* the Croesus temple. There are other indications in favour of this dating: the middle part of the wall is built of limestone ashlar blocks similar to those of the C structures, and these seem to be re-used blocks taken from the damaged walls of Temple C, but the N. and S. ends of the wall are terminated by marble coigns of the same material as that used in the walls of Temple D and hammer-dressed in the same way; furthermore the N. and S. faces of the wall are not flush with those of the underlying C foundations but are set back unequally, the N. face 0·55 m. and the S. face 0·94 m.; in this way the distance of the basis from the N. and S. walls of the cella of Temple D was equalised (Hogarth, *op. cit.*, p. 261). As the

surface of the preserved wall lies at level  $-3.20$  m. while the surface of the cella pavement of Temple D lies at  $-3.10$  m., it is clear that the wall in question is only a foundation for the basis of Temple D, and nothing remains of its superstructure: this is also clear from the fact that the marble coigns, though hammer-dressed as mentioned above, are not properly squared and the face of one block in the N.E. angle is badly injured. Hogarth seems therefore to be right in considering these blocks as damaged by the builders, and therefore relegated for use in substructures.

Hogarth is therefore right in assigning this superimposed wall to Temple D; but his suggestion that the cleavage in the underlying wall of Basis C was caused by a subsidence while the erection of the wall was in progress and that the wall was then immediately and hastily restored, which would explain the rough and irregular work of this repair, seems to be less well founded, because the cleavage appears in the restored part of the wall, and the subsidence which caused the cleavage must therefore have taken place after the repair of the wall. It seems indeed necessary to suppose that the subsidence took place even after the erection of the basis of Temple D, because otherwise the builders of that temple would certainly not have allowed this defect in the foundation of the basis to remain. Finally, there is no reason to suppose that the restoration of the C wall was caused by a subsidence while it was being built. In that case the wall would have been repaired with a more regular coursing, in the same technique of construction as its remaining, undamaged part, and had the wall in its repaired state been visible during the time of Temple C it would at least have been necessary that the blocks should be smoothly dressed. These facts seem to be satisfactorily explained if we suppose that the wall had collapsed upon the destruction of Temple C and was repaired by the builders of Temple D: the irregular coursing and rough face of the wall are thus explained by the fact that the wall was no longer visible but only served as a substructure for the basis of Temple D. The discussion of this problem may seem superfluous, but is of a certain importance for my argument (cf. p. 26 f.).

Apart from the enlarged basis and the new sekos wall, an exterior rectangle of walls was built which also must be assigned to Temple C. This rectangle encloses an area measuring  $31.0$  m. in length and  $15.50$  m. in width. That it belongs to Temple C is shown by the following two

facts:—1. It is built over by the structures of Temple D and must therefore be earlier than that edifice. 2. It cannot be as early as Temple B, because its west wall is associated with a foundation of large limestone slabs, which in all probability represent the supporting fringe of a pavement the level of which can be fixed at  $-4.10$  m., *i.e.* about  $0.35$  m. above the floor of Temple B. This rectangle has the shape of a Greek temple cella with projecting antae. Hogarth takes this as a proof that the basis now supported a Greek temple cella, and from the fact that the west wall is of a particularly solid construction he infers that the temple had columns between antae. No fragments of columns or of a temple entablature which can be assigned to this sanctuary were, however, found, and it seems therefore more likely that the walls are only remains of an outer enclosure.

We thus see that these three successive sanctuaries are representatives of the same architectural type in spite of the rebuildings and amplifications undertaken: it is a sanctuary consisting of an open temenos with a central altar and basis for the cult object, and screened off by inner and outer enclosing walls.

After the destruction of Temple C a new era began in the history of the Ephesian Artemisia. The place was entirely levelled and the large Ionic temple, in which Croesus dedicated columns, was erected on the debris of its predecessors. This Temple D does not concern us here, apart from the restoration of the basis mentioned above, and I shall not therefore enter upon a description of its architecture and the connected problems.

The description of Temples A-C given above has shown that I consider Hogarth's architectural analysis in general correct. Ch. Picard, who has treated this subject in 'Ephèse et Claros,' *Bibliothèque des Écoles françaises d'Athènes et de Rome*, Fasc. CXXIII, 1922, accepts also, in the main, the results of Hogarth's examination. Hogarth's opinion has, however, met with criticism from Weickert in his *Typen der archaischen Architektur in Griechenland und Kleinasien*, pp. 16 ff., and Löwy in his *Zur Chronologie der frühgriechischen Kunst*, Sitzungsberichte, Bd. 213, Abh. 4, der Akademie der Wissenschaften in Wien, Philosophisch-historische Klasse, 1932.

Weickert accepts Temples B and C, but tries to show that the structures of Temple A cannot be considered as an architectural unit. He proposes to split up these structures into at least two parts repre-



senting two successive building periods, and assigns the T-shaped platform to the first period and the basis, together with the rectangular platform, to the second period. Weickert cannot, however, produce any acceptable reason in favour of his theory, which he bases upon the following argument: 'Es ist sicher falsch, wie das die Ausgräber taten, T, B und N (*i.e.* the T-shaped platform, the rectangular platform, and the base) als gleichzeitig entstanden aufzufassen. Das verbietet die vorzügliche Technik von N. Es scheint im Gegenteil möglich, dass die hocharchaischen Elfenbeinsfigürchen des VIII. Jahrhunderts als Depot schon bei der Errichtung von T beigesetzt wurden, dass also zwischen T und der von Errichtung von N ein ganz beträchtlicher Zeitabstand liegen kann.' This is an unsatisfactory argument. In the first place, the fact that the blocks of the basis are well dressed while those of the T-shaped platform are not so carefully worked naturally affords in itself no proof that these structures belong to different building periods. Only if other, conclusive indications point in that direction can difference in construction be used as additional evidence, but in this particular case an examination of the structural relation of the basis and the T-shaped platform to each other shows that they must be contemporary, as pointed out, p. 17, and their difference in construction is therefore no evidence against this fact. This difference is easily explained by the different use and character of the two structures: the basis was an altar supporting the cult object, while the T-shaped platform probably served as an approach to the former. Finally, I wish to draw attention to a curious inconsistency in Weickert's argument: he considers the T-shaped platform and the basis to belong to different building periods on account of their difference in construction, but the rectangular platform, which is of the same material and construction as the T-shaped platform, he apparently considers to be contemporary with the basis.

We now turn to Löwy's criticism of the architectural analysis given above. The results of Löwy's examination can be best summed up in his own words: 'Es lassen sich also sämtliche für einen Tempel C in Anspruch genommenen Fundamente, ganz ebenso wie B und A, in den Zusammenhang des grossen Kroisostempels einordnen. . . . Das will sagen, dass aus dem baulichen Tatbestand das Vorausbestehen anderer Tempel an der Stätte des Baues des VI. Jahrh. nicht zu begründen ist. Auch wenn wir die Aufeinanderfolge der einzelnen

Mauern genau so wie die Herausgeber annehmen, ist es die Aufeinanderfolge der Teile eines vielleicht langsam fortschreitenden, aber doch einheitlichen Baues. Und nehmen wir diese Langsamkeit selbst schon für die ersten Stadien des Baues an, wo das zu bewältigende Volumen an Material und Arbeit noch ein verhältnismässig geringes war, brauchen wir den Baubeginn, und damit die Hinterlegung des Gründungsdepots, schwerlich mehr als höchstens einige Jahrzehnte vor der Säulenstiftung des Kroisos anzusetzen' (pp. 20 ff.).

We thus see that Löwy denies the existence of three successive temples—A, B, C—before the erection of Temple D, the Croesus temple, and considers the structures assigned to these temples as nothing else but foundations for the Croesus temple. I must confess at once that I consider Löwy's interpretation of the architectural remains to be a failure. I have carefully studied Hogarth's excavation report, and the more I have penetrated into this work the more admirable I have found it to be. Hogarth has done a meticulously good piece of archaeological field work, registered all the facts observed, considered their evidence with an unprejudiced mind and drawn the inevitable conclusions from these facts. His interpretation may be incorrect in details, but he never urges his less certain suggestions, and he distinguishes sharply between facts and theories. His argument can be strengthened and sharpened—on the evidence of the facts published by himself, as shown above—but in the main his observation was correct. In consideration of the very unfavourable conditions in which the excavation was made—the ground-water was sometimes almost one metre above the surface of the basis, and the water had to be drained away by pumping—I do not hesitate in calling Hogarth's excavation a great work, and I do not think that, in these conditions, many excavators would have obtained the same satisfactory results.

Löwy is the exact opposite of Hogarth in his attitude towards the archaeological problem in question. He pays no attention to field-archaeological methods: the observations made by the excavator are disregarded, the facts revealed by the excavation are treated as if they could be interpreted in the way the author deems it logical and not in the way indicated by themselves. In view of this it is justifiable to ask: What is the use of doing all the painstaking excavation work of careful observing and collecting every scrap of evidence in order to present the facts as exactly as possible so that it may serve as a docu-

mentary material for further researches—what is the use of doing all this, if the interpretation of the facts can be based on other evidence than that indicated by the facts? Equally well the text of an ancient author could be edited without paying any attention to the readings of the MSS.

I have emphasised this subject because it is a matter of principle, and I return now to the actual question and set forth the more important facts telling against Löwy's theory.

1. The blocks of the schist basis are extremely carefully dressed on the outside but they are roughly shaped on the inside, which was invisible, abutting on the filling of the basis. One would imagine that the builders of the basis did not dress the blocks of its outer face so carefully only for the pleasure of hiding it, and we may therefore infer that the schist basis was meant to be visible and that it was not a substructure hidden by revetting walls and superstructures, but Löwy sees no difficulty in explaining this fact: 'der sakrale Charakter und die besondere Wichtigkeit konnten die sorgfältige Bearbeitung und die Wahl des ungewöhnlichen Materials bestimmen.' I think, however, that the inside of the basis was not less sacred than the outside, and it remains therefore to be explained why the religious devotion was concentrated upon the outside. This is the first sacred mystery.

2. It was shown above, p. 18, that there are remains of a pavement of limestone slabs overlying the B and C walls of the basis at level —3.52 m. One of these slabs has 'setting-out' marks indicating the position of something that had been erected on it, probably the cult object.

The substructure walls assigned to the basis of the Croesus temple are laid on top of this paving (p. 20 f.). If the walls of Temples A-C are only substructures for Temple D, it is remarkable that the builders of the temple yielded to the caprice of laying a paving of limestone slabs on these substructures about 0.42 m. below the pavement of the temple, and that they carved one of the paving slabs with 'setting-out' marks for something to be erected there.

Löwy (pp. 30 ff.) tries to evade this difficulty for his theory by assuming that these slabs do not represent a paving but are simply substructures for the pavement of the Croesus temple. The substructure for this, however, is formed by heavy, rectangular blocks, 0.35–0.40 m. thick, and with only roughly dressed surface, while the



slabs of the pavement of the basis are thin, about 0.04 m. thick, made of another kind of yellow limestone, with a smooth surface, and apart from the 'setting-out' marks bore traces of red colouring. In consideration of the fact that the A basis, if a substructure for the D basis, forms its lowermost and innermost part, while the substructure walls on top of the paving slabs are the highest part, just below the pavement of the D cella, it is further remarkable that the outer face of the latter substructures is only roughly dressed in comparison with the face of the A basis. Since Löwy considers the sacred character of the basis to be the cause of the face dressing of the blocks, it seems that the substructures of the basis were less sacred at the top than at the bottom. Since, further, the revetting walls of Bases B and C are built of a coarser limestone and their faces are not so extremely well dressed as the schist face of Basis A, it seems that there was also a lateral decrease of sacredness in the basis substructures. This is the second sacred mystery.

3. The north, south, and east walls of Basis A have been destroyed down to the last course of blocks and were not restored. Some blocks of the damaged parts of the basis were used in the walls of Basis B. The revetting walls of the enlarged B and C bases are also in a ruinous state and have not been restored either—with one exception: the C wall below the preserved remains of substructure walls which alone can be proved to be those of the basis of the Croesus temple on the evidence given above, p. 21. If these walls belong to bases of successive temples, the one replacing the other on a larger scale, the facts mentioned above are easily understood, but if they are considered to be a continuous series of coherent substructures for the basis of the Croesus temple, we become involved in a series of improbabilities and impossibilities. The walls must then have been subject to successive collapses while the work was in progress; on no occasion were they restored, but each time revetted and replaced by added walls of a different material and construction from the original basis, and the outermost walls were laid on a higher level than the inner ones and partly on top of these—everything speaking against their forming a coherent system of substructures. But the main and conclusive objection to Löwy's theory is this: if the inner walls of these supposed substructures for the basis of the Croesus temple were not restored after their collapse, at least the exterior walls—those of Basis C—forming the outer frame of these substructures should have been restored if they were to serve their

purpose. This is not the case: in particular, the west wall and west part of the south and north walls of Basis C are in a very ruinous state. But can it be proved that they collapsed before the superstructure of the Croesus temple was erected? Yes, they were covered by the pavement slabs of this temple, which Hogarth had to remove in order to examine the architectural remains below. Only in one place, as mentioned above, were the walls of Basis C restored, viz. in the east part of the basis; and only in this place are there remains of substructures which can be assigned to the basis of the Croesus temple. The conclusions may thus be summed up: as the walls of Bases A-C were in a ruinous state when the Croesus temple was built, they cannot have served as substructures for that temple but must belong to earlier buildings; only a part of the walls of Basis C was restored in order to serve as foundation of the substructure for the basis of the Croesus temple.

4. There are other walls outside the bases and below the level of the Croesus temple, *i.e.* the sekos walls of Temples B and C and scanty remains of temenos walls, which cannot have served as substructures for the Croesus temple since there are either no walls, bases or other structures of this temple to be supported in the places where these walls were found; or in places where they coincided with the structures of the Croesus temple, *e.g.* the inner sekos wall of Temple C, this was so far from being used as a substructure that it was in places completely destroyed by the foundations of the Croesus temple (Hogarth, *op. cit.*, pp. 68 ff.). These foundations prove to be real substructures constructed of unworked or roughly worked blocks—quite different from the technique of the walls of Temples A-C, which, as mentioned above, are real walls with well-dressed faces.

5. There are remains of pavements associated with the walls of the pre-Croesus temples. These floors, together with the floor of Bases B and C at level  $-3.52$  m. mentioned above, pp. 18, 20, afford another clear evidence that we have to do with remains of actual buildings. Löwy tries to evade this evidence, too. As regards the floor of the temenos of Temple B, at about level  $-4.43$  m., he cannot see how the floor of the basis was reached from this level; and the existence of this temenos paving is therefore disregarded by him. On account of lack of evidence we can only solve this question by conjectures: but that affords no reason to disregard the existence of the temenos pavement.

The floor-level of Temple C, at about level  $-4.10$  m., Löwy finds it impossible to recognise, because the east wall of Basis C has been roughly restored up to about level  $-3.51$  m. (cf. p. 20) and must therefore have been below ground up to that level. This argument cannot be accepted, because it has been shown (*loc. cit.*) that the wall in question was restored after the destruction of Temple C in order to serve as a foundation of the substructure for the basis of the Croesus temple.

6. The facies of the finds shows that the objects found within Basis A are to be considered as a foundation deposit of *ex votos* buried there at the time of construction of the basis. The filling was mixed with sacrificial debris, animal bones, etc. This filling was undisturbed and must be contemporary with the basis, the blocks of which abut upon it. Outside Basis A, more than 2000 objects were found below the level of the Croesus temple and within the area enclosed by the exterior sekos wall of Temple C. They were found either scattered about or in definite groups, called 'isolated pockets' by Hogarth, and evidently representing objects deposited in receptacles of perishable material. Only in two cases were these of a solid material: a terracotta jar containing 19 electrum coins (*op. cit.*, pp. 42 ff.), and a cist constructed of small stones, where 2 electrum coins, a crystal bobbin and an ivory statuette had been deposited (*op. cit.*, p. 44). How are these objects found outside Basis A to be explained? Are they, too, foundation deposits? Löwy thinks so, but there is evidence against this supposition. *A priori* it is a very unlikely idea that more than 3000 objects in all should have been buried as a foundation deposit at the erection of the Croesus temple, but, of course, that affords no proof. An indication against this theory is, however, given by the fact that the filling is of different composition inside and outside Basis A. Inside, as pointed out above, it was mixed with sacrificial debris and animal bones, etc., while such sacrificial remains are missing outside the basis. Hogarth has drawn attention to other facts: the objects found within the basis are of a select character and consist mainly of coins and specimens of precious metal, and only a small number were of other materials, *e.g.* fibulae, pins, pendants, etc., of ivory; pendants, whorls, and beads of faience; beads of glass and amber, etc.; all these objects were intact and in a good state of preservation; the objects found outside Basis A were, in the main, damaged and fragmentary and of a miscellaneous nature, consisting not only of coins and specimens of precious metal



similar to those found inside the basis but also of a great many objects of other materials, among them the well-known ivory statuettes. All these differences as regards the facies of finds indicates that the objects do not form a uniform find group but represent two different find categories. Only the objects found in the basis can be proved to form a foundation deposit, as is indicated by the sacrificial remains in the filling of the basis, the select character of the finds and the fact that they were found intact. The absence of sacrificial remains in the earth outside the basis, the miscellaneous character of the finds, their fragmentary state of preservation and their scattered find-spots, on the other hand, show that these objects are of a different category of finds. There is nothing in the facies of finds to induce us to interpret them as anything else than contents of regular culture strata, remains of various kinds of *ex votos* broken at the destruction of the temples where they were deposited and left behind in the 'culture earth' of the destroyed temples. Löwy objects to this interpretation for two reasons. The first objection is this: Hogarth combines the destruction of Temple A with the attack of the Cimmerians; it seems, however, unlikely that so many precious objects would have been overlooked by the pillagers. This objection is futile, because the chronology of the finds (cf. below) shows that the Cimmerians who devastated Ephesus about 660 B.C. cannot have destroyed Temple A, which must have been built after that date. The second objection is this: it is impossible to imagine how so many small objects could have been deposited as *ex votos* in an open temenos. This objection is best answered by a reference to similar conditions in, *e.g.*, the temene of Idalion and Ajia Irini (*The Swedish Cyprus Expedition*, II, pp. 595 f., 809) and other places.

These are the main points telling against Löwy's theory and in favour of Hogarth's interpretation. Other supplementary evidence can be produced, but the above may suffice.

We now proceed to the chronological problem of the objects found in Temples A-C.

For determining an absolute date for the finds we have a fixed lower chronological limit: they must be earlier than the foundation of the Croesus temple. It is generally agreed that this temple cannot have been later than 550 B.C. An upper chronological limit is given by the scarabs found in the bases of Temple A. Dr. Max Pieper has

examined these and states without the slightest hesitation ('Wenn eine Antwort immer so einfach lauten könnte, wäre ich froh') that they are all of the XXVIth Dynasty, *i.e.* must be later than c. 660 B.C. It is, of course, impossible to say how long after this date they were deposited in the basis, but, on the other hand, the erection of Temple A can hardly be dated later than c. 625 B.C., because then there would not be sufficient time for the duration of the three successive Temples A-C, the last of which cannot have been destroyed later than 550 B.C. If we assign the erection of Temple A to between 650 and 625 B.C., each temple would have lasted approximately twenty-five to thirty-five years. Such a fairly rapid succession of the temples is not without parallels (cf. *Liverpool Annals of Arch. and Anthropol.*, 1934, p. 83), and Hogarth himself points out (*op. cit.*, p. 239) that the unstable marsh bed of the Artemision site may be held to account for a rather rapid series of restorations.

The evidence of date afforded by the scarabs is not contradicted by the other objects found in the basis of Temple A. The coins are of no chronological importance because their date is very uncertain (cf. Hogarth, *op. cit.*, p. 240), and even if it could be proved that some of them are earlier than the scarabs they afford only a *terminus post quem* (*op. cit.*, p. 88). Unfortunately, the pottery, too, is of very little significance in chronological respect. Three painted sherds and two small, plain jars were found in the basis. The jars are not described, nor illustrated, so that it is impossible to ascertain their date. Of the painted sherds, one fragment (*op. cit.*, Fig. 46, p. 220) is Geometric and is certainly earlier than 650-625 B.C. This sherd, however, does not belong to a vase deposited in the basis contemporarily with the coins, the scarabs, and other *ex votos* in precious metal, etc., but has apparently slipped in with the filling of debris which may be mixed with earth of earlier 'culture remains.' This sherd affords therefore only a *terminus post quem*. The same holds good for the other two sherds (*op. cit.*, Figs. 47 and 48, p. 220), though they are of later date and may very well not be earlier than 650-625 B.C.

Among the objects in precious metal and the ivory statuettes, there is not a single specimen which we are obliged to date earlier than 650-625 B.C., on the evidence of our present knowledge of archaic Greek chronology (cf. below).

As regards the chronology of the finds I am unable to accept either

that proposed by Hogarth and his followers or that proposed by Löwy. Löwy's dating is wrong on account of his false interpretation of the architectural data; and Hogarth, who is right in his architectural analysis, arrives at wrong datings because he rejects the only safe chronological material in this case, *i.e.* the scarabs, and involves himself in a series of hypotheses based on false premises. These are of two kinds. The one is this. He connects the destruction of Temple A with the sack and conflagration of the Artemision that happened about the middle of the seventh century B.C., and according to literary evidence was caused by the tyrant Lygdamis and the Cimmerians (*op. cit.*, pp. 6 and 239). I quote his argument (p. 239): 'We observed a stratum of calcined matter on certain parts of the Primitive area—*e.g.* at the western end. Its occurrence was always hailed by my foreman and more intelligent workmen as a sure sign that treasure was about to be found. Such patches seem in fact to have indicated spots where deposit prior, at any rate, to C period, and probably, from its low level, prior also to B, had not been disturbed by later builders. Unfortunately, since its presence depended on there having been no disturbance by the putting in of deep foundations, it never occurred actually below a B wall; but, on account of its level and the objects it contained, I regard this stratum as commemorative of the destruction of A, and make this suggestion, that the first Primitive shrine A was burned by the Cimmerians about 660 B.C., and that Temple B dates from that epoch, and perhaps that which Lygdamis was bidden to build in expiation of treachery to the Goddess. If that be the case, the founding of Temple A cannot well have taken place much later than the year 700 B.C.'

It is obvious that this argument is weak. In the first place, the burnt stratum cannot for certain be associated with Temple B according to Hogarth's own statement. Secondly, there is nothing to prove that this burnt stratum represents remains of a fire caused by a violent destruction of the sanctuary. Thirdly, the notice about the sack of the Artemision by Lygdamis and the Cimmerians may very well be referred to the Artemision at Ortygia, as pointed out by Löwy (*op. cit.*, p. 41).

Hogarth's second error is this. He compares the Ephesus finds of jewellery and ivory sculptures with objects of this kind found at Camirus, Enkomi, and Nimrud. As a result of these stylistic comparisons, Hogarth arrives at the conclusion that the upper chronological



limit of the Ephesus finds is about the close of the eighth century B.C. Hogarth has, however, partly corrected himself in this respect (cf. *Ionia and the East*, pp. 58 ff.); and, as a matter of fact, his arguments are quite inconclusive as shown by Löwy and others (cf. Löwy, *op. cit.*, pp. 24 ff.). To sum up: the lower chronological limit, c. 550 B.C., is given by the approximate foundation date of the Croesus temple, the upper chronological limit cannot be fixed earlier than c. 650 B.C. on account of the evidence of the scarabs found in the earliest deposit, i.e. the basis of Temple A, and it cannot be fixed considerably later than c. 625 B.C. on account of the architectural history of the temples.

The upper and lower chronological limits are thus fixed. The absolute dates of each temple can, naturally, be only approximately calculated within these fixed points: paying due regard to the approximate character of the dates and assuming that the temples lasted for about equal periods of time—and there is nothing to contradict this supposition—we may postulate for the end of Temple A a date about 600 B.C., or shortly earlier, and for the end of Temple B a date about 575 B.C., or shortly earlier, the earlier or later dates depending upon the date of the erection of Temple A.

Finally, we come to the problem of attributing the finds to these temples thus dated.

The objects deposited in the basis are contemporaneous with the erection of Temple A, and cannot therefore be later than 650–625 B.C.

As regards the objects discovered outside the basis, only those found in relation to some of the temple walls can be chronologically determined on stratigraphic evidence. Thus, objects found beneath walls of Temple B or in the filling between walls of Temples A and B cannot be later than the latest possible end of Temple A, or 600 B.C., and objects found beneath walls of Temple C or in the filling between walls of Temples B and C cannot be later than the latest possible end of Temple B, or 575 B.C.

The objects found outside the basis but without a relation to the architectural remains cannot be attributed with certainty to any particular temple. Hogarth is right in pointing out that no stress should be laid on the levels of these finds; the earth on the Artemision site was so shifting that objects from these strata have sunk down to the bottom stratum. In general, it is therefore not possible to assign these finds with certainty to any of Temples A-C, but they must from

the stratigraphical point of view be treated as a unit. Only in one case do I think that we may venture a more definite dating. Within the western part of the W. area there were found a certain number of objects along the western cross wall of the outer sekos of Temple C (Hogarth, *op. cit.*, pp. 43 ff.). No walls of an earlier period occur in this peripheric part, which was not included in the sacred area of Temples A-B. The objects were found *in situ*, in 'isolated pockets,' especially in the S.W. and N.W. corners of the area, *i.e.* in undisturbed groups apparently located along the walls of Temple C, in the same way as could be observed in the temenos at Idalion excavated by the Swedish Cyprus Expedition (cf. *The Swed. Cypr. Exped.*, II, pp. 595 f.). As it cannot be assumed that *ex votos* were deposited outside the sekos wall, in the open field, it seems necessary to assign these finds to a period when the area in question was within the sekos wall, *i.e.* the period of Temple C.

Another group of objects found within the same area (Hogarth, *op. cit.*, p. 41) was not *in situ* but had been disturbed by later building activity. Though the bulk of these finds, too, may belong to Temple C, one must always reckon with the possibility that they were mixed with foreign material at the time of the disturbance, and it is therefore necessary to exclude these finds from the stratigraphically tested material for dating.

On the basis of this facies of the finds a considerable number of objects can be stratigraphically assigned to a defined space of time between 650-625 and 550 B.C., while the remainder of the finds can be assigned to the earlier or later part of the period in question only on typological grounds, in so far as their stylistic relation to those stratigraphically determined can be ascertained. I cannot here enter into details and give the evidence for the date of every single object; this, moreover, is superfluous, and it suffices to refer to Hogarth's register of the objects of each category of finds (*op. cit.*, pp. 232 ff.). In accordance with the dates of these categories given above it is easy to determine the chronology of any particular object. Before I conclude, however, I shall exemplify this, by fixing the periods of the most important objects which can be dated on stratigraphic evidence.

Pottery of Proto-Corinthian fabric and Corinthian aryballi (Hogarth, *op. cit.*, pp. 229 ff.) were found beneath a wall of Temple C (*op. cit.*, p. 42), and cannot therefore be later than 575 B.C. Pottery of the 'ibex

'fabric' was discovered within the western part of the W. area, close to the western cross wall of the outer sekos of Temple C. As shown above, this find spot assigns the pottery to Temple C, and it cannot therefore be earlier than 575 B.C. or shortly before, and not later than 550 B.C.

The bulk of the electrum and gold jewellery, as specified in Hogarth's list, *op. cit.*, pp. 232 f., was found in the basis of Temple A, and cannot therefore have been deposited later than 625 B.C.

The bronze figurines illustrated in Pls. XIV and XVI were discovered in the same stratum as the Proto-Corinthian and Corinthian pottery mentioned above (*op. cit.*, p. 234). These figurines can thus be assigned to Temples A-B, i.e. *must therefore* be earlier than 575 B.C., and *may* have been dedicated as early as the later part of the seventh century B.C.

No ivory statuettes were found in the base of Temple A. The earliest, clearly determined stratum containing ivory statuettes is the same as that with the bronze figurines just mentioned. This stratum yielded the female figurine with the spindle (*op. cit.*, Pl. XXIV, 1), the lion (Pls. XXI, 3; XXV, 12), the horse's head (Pl. XXVI, 10), the sphinx (Pls. XXI, 4; XXIII, 1), and the goat (Pls. XXI, 5; XXIII, 2). These ivory statuettes cannot therefore be later than 575 B.C., but *may* have been dedicated in the later part of the seventh century B.C.

Another stratigraphically determinable group of ivory statuettes was found in the 'isolated pockets' within the west part of the western area (cf. *op. cit.*, pp. 43 f.), i.e. in the same stratum as the 'ibex fabric' of pottery. These statuettes thus belong to the time of Temple C, i.e. they cannot be later than 550 B.C. and not much earlier than 575 B.C. The statuettes include the figurine with the hawks (*op. cit.*, Pl. XXIV, 8), the rampant lion (Pls. XXI, 1; XXIII, 3), the fore-part of a horse (Pl. XXVI, 9), the crouching boar (Pl. XXVI, 3), the duck's head (Pl. XXV, 11), and, foremost of all, the female statuette bearing on its head a pole surmounted by a hawk (Pls. XXI, 6; XXII, 1).

From the examination of the style of these ivory statuettes we find that the typologically latest specimens, represented by those last mentioned, were found in a stratum associated with Temple C, while the typologically earlier specimens, represented by those first mentioned, are associated with Temples A-B. This agreement between typology and stratigraphical evidence forms an additional proof that the interpretation of the latter, as given above, and the chronology based upon it, are right.



## NOTES ON THE FLINT IMPLEMENTS OF JERICHO, 1936

By JOAN CROWFOOT

WITH PLATES VI-X

From the point of view of the flints found, the most important result of this season's excavations is the separation of an industry lying between the Cananean and the Tahunian II of last year. This industry was undoubtedly present last season, but owing to the disturbed nature of the area at this level, and some likenesses between the flints in it and those of both the industries above and below, it was not separated then. This year we have, therefore, five layers of Early Bronze Age (layers III-VII) all with typical Cananean flints. Below this lies the new industry referred to above. Only one layer (VIII) of it exists. It is associated with pottery very similar to that from Teleilat Ghassul (*Annals*, XXIII, pp. 84 ff.), but so far with no metal. The next layer (IX) contains the Tahunian II flints described in last year's report. In this layer, the flints are found with the earliest pottery known from Jericho, distinguished from that of layer VIII by the absence of grits, and the addition of chopped straw to the clay (*Annals*, XXIII, pp. 77 ff.). No traces of metal were found in this layer. Below this we have excavated two layers (X and XI) and part of a third (XII), all of which contain the same flints as layer IX, but have neither pottery nor metal. Modelled clay animals and fragments of clay statues are fairly common; the clay used again has no grits.

The microlithic industry described in last year's report<sup>1</sup> lies at a depth of four metres below the floor of layer XI, and so was not reached this year. I should like to emphasise, however, the very meagre nature of this industry as found last season. Without further proof I do not think it can be accepted as an industry separate from the Tahunian II above it, from which it differs only in the absence of the larger tools.

The Late Bronze and Middle Bronze Age tools described below

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1. *Annals*, XXII, nos. 3-4, pp. 182-184.

come from the excavations in the Palace area, and are therefore not included in the table given on p. 50.

#### LATE BRONZE AGE

The flints from this period are very scarce. The material used is dark brown flint, with the crust stained dull orange.

*Sickle-blades.* Both the sickle-blades found are retouched along the back and across both ends. The cutting edge is irregularly denticulated and very lustrous. The blades measure  $50 \times 35$  mm. and  $39 \times 30$  mm.

*Blades.* These are rough, with very small unfacetted striking platforms, and much crust left. They show signs of utilisation.

Inventory :—

Sickle-blades . . . . .	2
Blades . . . . .	4
	<hr/>
Total . . . . .	6
	<hr/>

#### MIDDLE BRONZE AGE

(PLATE VI a)

All the largest tools are made of very coarse brown chert. The remainder are of either light-coloured chert or of brown or grey flint, unpatinated.

*Sickle-blades.* (Pl. VI a, 1-6 and 9-12.) The majority of the sickle-blades are much larger than any found in the Early Bronze Age. They are made on rather rough large blade sections, and have irregular steep retouch along the back and across both ends; the edges are often finely denticulated and are highly lustrous. The average dimensions of this type of sickle-blade are  $70 \times 25$  mm. The remainder are, like those of the Early Bronze Age, simple blade sections, sometimes retouched across both ends, sometimes resharpened, and usually used along both sides. Of these two are very large, measuring about  $100 \times 32$  mm. The rest are much smaller, averaging  $48 \times 16$  mm. One blade has flat retouch all over one surface, and along one side and across both ends on the other surface.

*Picks.* (Pl. VI a, 8.) One specimen only was found; it is large and fairly well made, retouched over both surfaces and rather battered along the sides.

*Scrapers.* The fan scraper, such a dominant element in the Early Bronze Age, is absent. The only scrapers found are on small, thick flakes, with steep rough retouch more or less all round.

'*Lames de dégagement.*' Again only one specimen was found. It is large and very rough.

*Blades.* (Pl. VI a, 7.) One blade, made of coarse chert, is a very large example of the typical Cananean blade. The remainder, made of flint, are very small and rough.

Inventory :—

Sickle-blades . . . . .	15
Scrapers . . . . .	2
Pick . . . . .	1
Graver . . . . .	1
<i>Lame de dégagement</i> . . . . .	1
Blades . . . . .	3
Blade sections . . . . .	3
Flake . . . . .	1
Various . . . . .	1
Total . . . . .	<hr/> 28 <hr/>

EARLY BRONZE AGE (Layers III-VII)

(PLATE VI b)

Dark brown, coarse-grained tabular flint is used throughout the layers for the scrapers. In layers III-V there is still some use of the very coarse brown chert used in the Middle Bronze Age. Below this the chert used for blades is buff-coloured and finer in grain.

All through these layers the flints are of the well-known Cananean industry.<sup>1</sup> This was described fully in last year's report, so it is dealt with more briefly here.

*Arrowheads.* (Pl. VI b, 2.) The only arrowhead found comes from layer V. It is rather roughly made, with irregular retouch round the tang only, along both sides on the upper surface, and along one side on the bulbar face.

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1. *Annals*, XXII, nos. 3-4, pp. 174-176. R. Neuville, 'Notes de Préhistoire Palestinienne,' in *Journal of the Palestine Oriental Society*, X, 1930, pp. 205-210; and 'Le Préhistorique de Palestine,' in *Revue Biblique*, April 1934, p. 257.



*Scrapers.* (Pl. VI b, 5.) Specimens of the true 'fan-shaped' scrapers are found in layers III, V and VII. However, rather long narrow scrapers are very much more common. They are made in exactly the same way, but on thicker flakes, with the bulb at the end instead of at the side of the flake. This type is found in all layers, but it is commonest in layer VII, from which all the large specimens come.

A fragment of tabular flint from layer VI has a lattice of lines incised in the cortex (Pl. VI b, 1).

*Sickle-blades.* (Pl. VI b, 4 and 7-10.) The usual Cananean sickle-blade, a simple blade section, usually used along both sides, sometimes resharpened, and rarely trimmed steeply along one side after further resharpening has become impossible, is found throughout all levels. The average dimensions are  $60 \times 20$  mm. Two sickle-blades are interesting as survivals of the common types of the Chalcolithic period of Jericho. One of these, from layer V, is steeply retouched along the back and both ends, and finely denticulated along the cutting edge. The other, from the upper part of layer VII, has flat retouch all round on both surfaces; it is wide for its length, measuring  $38 \times 22$  mm.

Sickle-blades of this type found last year mixed with Cananean flints and therefore described as Early Bronze were all from the lower part of the deposit, where the pottery was already changing to Chalcolithic, and I think that these sickle-blades mostly belonged to our layer VIII of this year; it is possible that one or two of them were Early Bronze, and were survivals of the Chalcolithic types like the two described above.

*Gravers.* Two gravers were found, both in layer VII. One is a transverse straight-trimmed angle graver, rather rough, and the other a well-made, single-faceted graver. Both are made on blade sections.

*Borers.* (Pl. VI b, 3.) One specimen is very well made, double-ended, and steeply retouched along both sides. The others are much rougher.

*Blades.* (Pl. VI b, 6.) These are of the usual Cananean type. The largest specimens, measuring about  $130 \times 25$  mm., come from layers IV and V. In layer VI the blades are smaller, but are still quite typical. In layer VII, two blades only are like those of layer VI; the

remainder are rough and small, battered at the bulbar end like those of the Chalcolithic and Neolithic periods, and made of flint.

*Flakes.* These are very small and rough, with plain striking platforms; they rarely show any signs of use. They are struck from heavily rolled chunks of flint.

Inventory :—

Arrowhead . . . . .	1
Sickle-blades . . . . .	65
Fan scrapers . . . . .	9
Fan scrapers, long and narrow . . . . .	18
Gravers . . . . .	2
Borers . . . . .	4
Blades . . . . .	38
Blade sections . . . . .	68
Flakes . . . . .	61
Cores . . . . .	5
Various . . . . .	13
Microlithic series :	
Blade . . . . .	1
Cores . . . . .	2
Total . . . . .	<u>287</u>

## THE CHALCOLITHIC PERIOD (Layer VIII)

### (PLATES VII AND VIII)

Most of the flint used in this period is wadi flint, much rolled pebbles of very varying quality and colour. Some buff chert is used. There is some use of tabular flint; but only two small fragments of tools made on flakes struck from such flint were found; the other implements made from tabular flint are on chunks, with the crust still covering both surfaces.

*Arrowheads.* (Pl. VIII a, 1-13.) The arrowheads are remarkable for their small size. The majority have a long tang, often nearly half the total length of the arrowhead, very small wings, and slightly convex or straight sides; flat retouch covers the upper surface only; these are very small, but rather thick, measuring about  $25 \times 8 \times 3$  mm. In

a few specimens (nos. 2-4) the tang is only separated from the head by a small concavity. These are the most beautifully made; very small parallel flake scars cover either one or both surfaces, and the edges are finely serrated. Three arrowheads (no. 8) are very narrow and thick, with no separation between tang and head; they are retouched over both surfaces, and measure about  $30 \times 6 \times 4$  mm. No. 12 is unique in shape; it is retouched over both surfaces. The few larger specimens have heavy tangs and small wings; two of these are retouched all over the bulbar face, the remainder only over both surfaces of the tang.

*Sickle-blades.* (Pl. VIII a, 14-28.) The sickle-blades show a variety of types, all quite common.

A large number have the back and ends neatly retouched (nos. 14-17); the cutting edges are usually finely denticulated. These are usually short and rather wide, the average dimensions being  $24 \times 15$  mm.

Very regular coarse denticulation is seen on a number of sickle-blades (nos. 18-21). The best specimens showing it have very regular flat retouch over the upper surface and all round the bulbar face. There are other blades showing either the coarse denticulation without the flat retouch, or the flat retouch without denticulation. These sickle-blades are about 12 mm. in width and vary from 25 to 50 mm. in length.

There are a few larger sickle-blades (nos. 22-25). Four of these, and fragments of six others, are pointed at one end and square at the other, slightly concave along the lustrous edge, and covered over both surfaces with flat retouch. The complete specimens measure about  $80 \times 20$  mm. All these blades were found in deposits in which there was a mixture of Chalcolithic and Neolithic (particularly the chocolate painted) pottery. They may therefore belong either to layer VIII or to layer IX, and I have tentatively placed them in the former on typological grounds.

The rest of the sickle-blades are fragments of blades, often used along both sides, often resharpened, and sometimes finely denticulated.

*Celts.* (Pl. VII b, 1.) One fine specimen only was found, just above a Chalcolithic floor; it was not sealed from the Early Bronze deposits above, but it lay 20 mm. below the lowest Early Bronze pottery. It is trapezoidal in section; the wider surface and the sides



are retouched all over, the scars running parallel to the working edge; the narrower surface has crust left over it. The edge has been trimmed by the removal of flakes running parallel to the sides of the tool and then ground and polished. The butt has also been trimmed and ground to make a much blunter edge.

*Picks.* One very rough specimen was found. It is made of flint, roughly trimmed over both surfaces, and has a thick butt.

*Chisels.* (Pl. VII b, 2, 3 and 5.) There are only three chisels: two of these are small and fairly well made. They are retouched over both surfaces: on one specimen the retouch is at right angles to the sides of the tool; on the other it is at right angles to the sides on one surface and parallel on the other. The third chisel was found in the edge of a Chalcolithic pocket intruding into layer X. It may therefore belong to either layer VIII or layer X. However, the edge of it has been ground, and as no other ground tools made of flint have been found below layer VIII, I have placed it provisionally in this layer. Apart from the grinding on the edge it is very roughly made, with trimming over one surface only.

*Knives.* (Pl. VII b, 4.) One magnificent knife, measuring  $134 \times 40 \times 11$  mm., was found. It is made on tabular flint, the cortex being left on both surfaces. The convex back is a natural fracture, patinated orange, slightly rolled, and not retouched. There is neat flat retouch on both surfaces along the concave edge and across one end and on one surface across the other end. This tool would make an excellent sickle; there are no signs of lustre along the edge, but it appears to have been resharpened by further retouch on one surface, and any lustre formed may have been removed in this way. Three fragments of similar knives were found, all made on chunks of tabular flint with a natural fracture along the back and retouch along the edge on both surfaces. The largest of these measures  $88 \times 24 \times 11$  mm.

*Scrapers.* (Pl. VII a, 11-14.) These are mostly very rough flakes, retouched along one or more sides. Some are very thick, with plain striking platforms and very rough, steep retouch. The thinner flakes sometimes have plain, sometimes faceted striking platforms, and some of these have quite neat flat retouch more or less all round.

There are a few end-scrapers. They are made on blades, and have steep, rough retouch across the end only.

There are two small fragments of flakes struck from tabular flint, neatly retouched exactly as in the Early Bronze Age (no. 13).

Several core-scrapers (no. 11), made on microlithic cores, are exactly like the oblique-fronted steep scrapers so common in Upper Palaeolithic and in Mesolithic industries.

*Gravers.*<sup>1</sup> (Pl. VII a, 7-10.) The gravers are quite well made. The majority have been resharpened.

(a) Single-blow : 7. One is made on a *lame de dégagement*, the rest on broken blades.

(b) *Bec-de-flûte* : 5. These are rather small, one made on a microlithic core, the rest on blade sections.

(c) Single-facetted : 4. One of these (no. 8) is especially well made, on a blade with a neat end-scrapers at the opposite end. The others are rougher, one on a blade section, the others on small thick flakes.

(d) Double-facetted : 1. This graver is well made, on the bulbar end of an Obsidian flake (no. 7).

(e) Angle : 16. The angle gravers are very neatly made. The retouch, except in one specimen, does not extend for more than a few millimetres from the graving edge. One specimen is double-ended, transverse concave-trimmed at both ends. Two are transverse straight-trimmed, eleven oblique convex-trimmed, and two oblique straight-trimmed. Three are very small, on fragments of flakes ; the rest are on blade sections.

*Borers.* (Pl. VII a, 1-6.) Borers are numerous and quite well made. They fall into two main groups : one of these is made on fairly thin flakes or blades and has retouch only near the tip ; the second type is made on thicker blades, and has steep retouch along both sides of the blade, with a blunt, strong point sometimes at both ends of the tool. These two types are equally common.

'*Lames de dégagement.*' These are on the whole rather small and rough.

*Core-tablets.* Only one small specimen was found.

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1. The classification used for the gravers is that given by M. C. Burkitt in *The Old Stone Age*, pp. 59-64.

*Blades.* (Pl. VIII b, 24-28.) The Cananean blade, with its central ridge removed in the characteristic way, is absent. The blades of this layer are battered at the bulbar end before the removal of the blade, and so have an extremely small striking platform. They are very irregular in size and shape; usually they are rather small and square across the end, in marked contrast with the beautiful slender pointed blades of the underlying layers. The majority have been utilised.

*Flakes.* These show the same battering at the bulbar end as the blades. Where the platform is present, it is usually plain, but it is sometimes quite neatly faceted. The flakes are generally small and rather thick, and show some signs of use.

*Cores.* (Pl. VIII b, 29.) These are very rough. Some are more or less pyramidal or oblique-fronted, with a roughly trimmed striking platform underneath. The rest are chunky, with flakes removed from all surfaces.

*Notched flakes.* A number of thick flakes are roughly trimmed to produce two or more notches. Sometimes the notches are fairly small and close together, and the result is a roughly serrated edge.

*Blades with nibbling retouch.* A few long, narrow blades have very fine regular nibbling retouch, either along one side or both.

*Retouched blades.* A few blades have neat flat retouch along one side, sometimes on the bulbar face but usually on the upper surface.

*Retouched microlithic blades.* (Pl. VIII b, 1 and 13-22.) Only one broken lunate (no. 17) was found; it has fine retouch along the back on one surface and along part of the back on the other surface. Microlithic borers (nos. 1 and 18-22) are very neatly made; they are steeply retouched, sometimes only near the point, sometimes along both sides; there is one very neat double-ended specimen; one borer (no. 1) is made of obsidian. Backed blades have in some cases quite steep retouch, in others very fine nibbling retouch. A few blades have steep retouch along both sides.

*Obsidian blades.* (Pl. VIII b, 2-3.) Four microlithic blade sections and one complete blade of obsidian all show marked signs of use.

*Microlithic blades.* (Pl. VIII b, 4-11.) These are quite common. They are battered at the bulbar end, and the majority have been utilised.



*Microolithic cores.* (Pl. VIII b, 12 and 23.) The majority are oblique-fronted, often worked from two fronts in different planes. There are five pyramidal cores. The remainder are very small and chunky.

At first sight the industry of layer VIII seems very different from the Tahunian II lying beneath it. The principal differences are as follows: the arrowheads are very much smaller, and are covered with flat retouch over head and tang instead of only over the tang; the sickle-blades, again, are much smaller and on the whole show more secondary retouch; coarse denticulation has appeared, though fine denticulation is still used.

In spite of these differences, however, it may be significant that the same types of tool, in the same numerical proportions, are found in both industries. It is further to be noted that these differences—namely, the smaller size and the greater use of secondary retouch—may be connected with the change in the material employed, from the large fine-grained nodules of Tahunian II to the rough wady pebbles used by the people of layer VIII. It is possible, therefore, that the industry of layer VIII is a later development of Tahunian II; but as, in this case, there must have been several stages between the two, we cannot be certain of the connexion until these stages have been found. It will be better, therefore, to use a different name for the flint industry of layer VIII, and we have accordingly decided to call it Jerichoan.

One of the intermediate stages between Tahunian II and Jerichoan may be represented by an industry found by Monsieur Neuville in the top layer of a sounding made at El-Khiam, near Bethlehem. It has not yet been fully published,<sup>1</sup> but Monsieur Neuville has kindly allowed me to examine the flints and to refer to them here. He places them in the Tahunian industry. Unfortunately the sounding was small, and there are not very many specimens, but there is one sickle-blade of the large type covered with flat retouch described on page 40 of this report, and one of the narrower type with coarse denticulation, also covered with flat retouch. The arrowheads, all of which have tangs and wings, are generally larger than those from Jericho, but a few are small and neat. However, the presence of more definite Mesolithic survivals,

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1. R. Neuville, 'Le Préhistorique de Palestine,' in *Revue Biblique*, April 1934, p. 256.

such as microburins and crescents, in the industry of El-Khiam suggests that it is earlier than Jerichoan.

Comparative material which may prove to be relevant has been found in Chalcolithic deposits on the following Palestinian sites :—

1. Wady Ghazze<sup>h</sup>.<sup>1</sup> The pottery from sites E and O of the Wady Ghazze<sup>h</sup> is similar to that from layer VIII of Jericho. The sickle-blade retouched along the back and ends is found in both places, but the specimens from the Wady Ghazze<sup>h</sup> are generally longer, and this type is so widely spread that its presence in both industries is not necessarily significant. In other respects the flints are not comparable.

2. Teleilat Ghassul.<sup>2</sup> The remarks made in the previous paragraph apply also to Teleilat Ghassul. Arrowheads are rare at Teleilat Ghassul, common at Jericho; celts, on the other hand, are common at Teleilat Ghassul, while only one specimen was found at Jericho, a specimen which is certainly not typical of the Ghassulian industry though it might not be out of place there.

3. Beisan and Megiddo. The flints from the Chalcolithic layers of Beisan (layers XVI, XVII, and XVIII) have not been fully published,<sup>3</sup> but Mr. FitzGerald has very kindly given me permission to refer to them here. In all three layers the majority of the sickle-blades are retouched along the back and ends; but in layer XVIII, as in Jerichoan, the Cananean blade has not yet appeared. In layers XVI and XVII, side by side with these sickle-blades, which have survived from the earlier period, there are typical Cananean blades and other flints of the Cananean industry.

At Megiddo,<sup>4</sup> Cananean blades occur in the earliest layers which have yet been found, but with these there are more sickle-blades with coarse denticulation than is usual among the Cananean flints from Early Bronze deposits.

It is interesting, therefore, to find on these sites the two commonest types of Jerichoan sickle-blade surviving into the earlier phases of the Cananean industry, one at Beisan, the other at Megiddo.

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1. Eann Macdonald, 'Prehistoric Fara,' in *Beth Pelet*, II, pp. 6-8.

2. R. Neuville, 'L'Outillage en Silex,' *Teleilat Ghassul*, I, pp. 55-65.

3. G. M. FitzGerald, M.A., 'Excavations at Beth-Shan in 1933,' in *P.E.F.Q.S.*, July 1934.

4. D. A. E. Garrod, 'Notes on the Flint Implements,' in *Notes on the Chalcolithic and Early Bronze Pottery of Megiddo*, by R. M. Engberg and G. M. Shipton, Appendix II, pp. 78-91.

## Inventory :—

Arrowheads . . . . .	37
Sickle-blades . . . . .	243
Fan scrapers, fragments . . . . .	2
Scrapers . . . . .	50
End-scrapers . . . . .	7
Core-scrapers . . . . .	10
Celt . . . . .	1
Chisels . . . . .	4
Pick . . . . .	1
Knives of tabular flint . . . . .	4
Gravers . . . . .	33
Borers . . . . .	54
Notched flakes . . . . .	14
Blades with nibbling retouch . . . . .	16
Blades with flat retouch . . . . .	16
Chopper . . . . .	1
<i>Lames de dégagement</i> . . . . .	36
Core-tablet . . . . .	1
Blades . . . . .	312
Blade sections . . . . .	654
Flakes . . . . .	351
Cores . . . . .	70
Various . . . . .	9
Microlithic series :	
Lunate . . . . .	1
Borers . . . . .	12
Backed blades . . . . .	14
Blades retouched all round . . . . .	5
Obsidian blades and sections . . . . .	5
Blades . . . . .	402
Cores . . . . .	48
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Total . . . . .	<u>2413</u>

## THE NEOLITHIC PERIOD (Layers IX-XII)

## (PLATE IX)

The flints of this period belong to the industry described as Tahunian II<sup>1</sup> in last year's report, where it was discussed in detail.

1. *Annals*, XXII, nos. 3-4, pp. 176-181. R. P. Buzy, 'Une Industrie Mésolithique en Palestine,' in *Revue Biblique*, 1928, pp. 558-578. R. Neuville, 'Le Préhistorique de Palestine,' in *Revue Biblique*, April 1934, p. 256.



Only the types which were uncommon or absent last year are described below. There is no difference between the flints from the four layers excavated this season. The floor of layer XI is the continuation of floor I shown on the chart on p. 183 of the 1935 report. Therefore, this year we have only the upper few layers of the industry, when the blades used were at their largest and very well made.

One type of arrowhead (Pl. IX a, 9-10), of which only two were found last year, is very common in these upper levels, and is probably characteristic of them. It has no wings and the tang is generally nearly one-third of the total length of the arrowhead. There is very delicate flat retouch all over the upper surface of the tang; the bulbar face usually is retouched only across the lower end of the tang, making a fine chisel edge, and along both sides near the point.

Last year I made a distinction between the longer and shorter blades with lustrous edges; on a few of the former which were complete at the bulbar end the lustre stopped at a line at right angles to the cutting edge, and I suggested that when longer blades were used as sickles they were hafted in the same way as modern table-knives. However, this year on the longest complete blades used as sickles, 100-120 mm. long, the lustre always stops at a diagonal line at one end only, sometimes at the bulbar end, sometimes at the tip (Pl. IX a, 1). The latter, at all events, must have been hafted lengthwise, for the tip is much too delicate to have supported the whole blade.

A small proportion of the blade sections have rather interesting ends (Pl. X). One-half of a very shallow notch remains on one corner of the sections, and a transverse facet runs from this notch to the opposite edge of the blade. A few of the specimens are double-ended, but the majority are just snapped off in the usual way at the opposite end. Notched tools do, of course, tend to break at the notch, and if they were numerous in this industry it would be reasonable to regard these blade sections as broken specimens; but in fact only two notched tools, both arrowheads, have been found during the whole of two seasons, and it must be concluded that these particular ends are not accidental. I do not think that these ends can have been intended as tools in themselves; a few could have been used as burins, but the transverse facet more often makes an obtuse angle with the shallow notch.

This same end occurs on some of the sickle-blades. I suggest that it was the result of a rather elaborate method of breaking the blades into sections, employed when a section of an exact length was required either to make the last section of a sickle fit into the haft, or to replace a lost or broken sickle-blade. The technique employed is similar to that used in the manufacture of the well-known Tardenoisean microburin, as suggested by M. Siret,<sup>1</sup> and afterwards elaborated in a series of experiments by Commandant Octobon<sup>2</sup> and Professor Barnes. I have tried the various methods suggested by M. Octobon and I find that blades of the type described from Jericho can best be produced as follows. A notch made in one edge of a blade is held astride the ridge of a core as anvil; the shorter axis of the blade will then be at right angles to the ridge. The edge of the blade opposite the notch is then struck with a wooden bar. The use of an anvil ensures that the blade is broken at the correct place, and the notch prevents too much battering of the edge when the blow is struck. This method is practically identical with that shown in experiment 7 of M. Octobon's article.

One celt was found (Pl. IX a, 18); it is made on a flake, with neat, flat retouch all round on the upper surface, and rather rough retouch across the end on the bulbar face.

There are a number of blades with fine nibbling retouch along one side or both. In the majority of these the retouch is near the bulbar end only, along both sides, and would be very useful in hafting the blade as a knife.

A few very thin, large flakes are denticulated in the same way as the sickle-blades round part of their circumference. The denticulation is made by retouch sometimes on the bulbar face, sometimes on the upper surface. None of these flakes have any lustre on the edges.

One scraper had a little reddish powder pressed into the facets of the retouch: Mr. V. R. Greenstreet, of the Department of Antiquities in Jerusalem, very kindly analysed this powder, and found it to be red ochre.

A number of very fine blade cores (Pl. IX b, 18) were found. They are all double-ended; the majority have crust left on the back; the striking platforms, one at each end, are unfacetted and are inclined at

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1. L. Siret, 'La taille des trapèzes tardenoisien', *Revue Anthropologique*, 1924, p. 115.

2. E. Octobon, 'Recherches sur la technique du "coup du microburin,"' in *Bulletin de la Société Préhistorique Française*, 1935, XXXII, p. 582.

an angle of rather less than 45° to the surface from which the blades have been struck.

Inventory :—

Arrowheads . . . . .	117
Sickle-blades . . . . .	797
Scrapers . . . . .	92
End-scrapers . . . . .	19
Core-scrapers . . . . .	5
Celt . . . . .	1
Chisels . . . . .	9
Gravers . . . . .	277
Borers . . . . .	163
Flakes with denticulated edges . . . . .	11
Blades with nibbling retouch . . . . .	52
Blades with flat retouch . . . . .	19
Notched flakes . . . . .	16
Choppers . . . . .	7
<i>Lames de dégagement</i> . . . . .	465
Core tablets . . . . .	57
Blades . . . . .	1653
Blade sections . . . . .	5059
Flakes . . . . .	502
Cores . . . . .	132
Various . . . . .	20
Microlithic series :	
Borer . . . . .	1
Backed blades . . . . .	9
Blades retouched all round . . . . .	3
Obsidian blades and sections . . . . .	11
Blades . . . . .	594
Cores . . . . .	19
<hr/>	
Total . . . . .	<u>10,110</u>



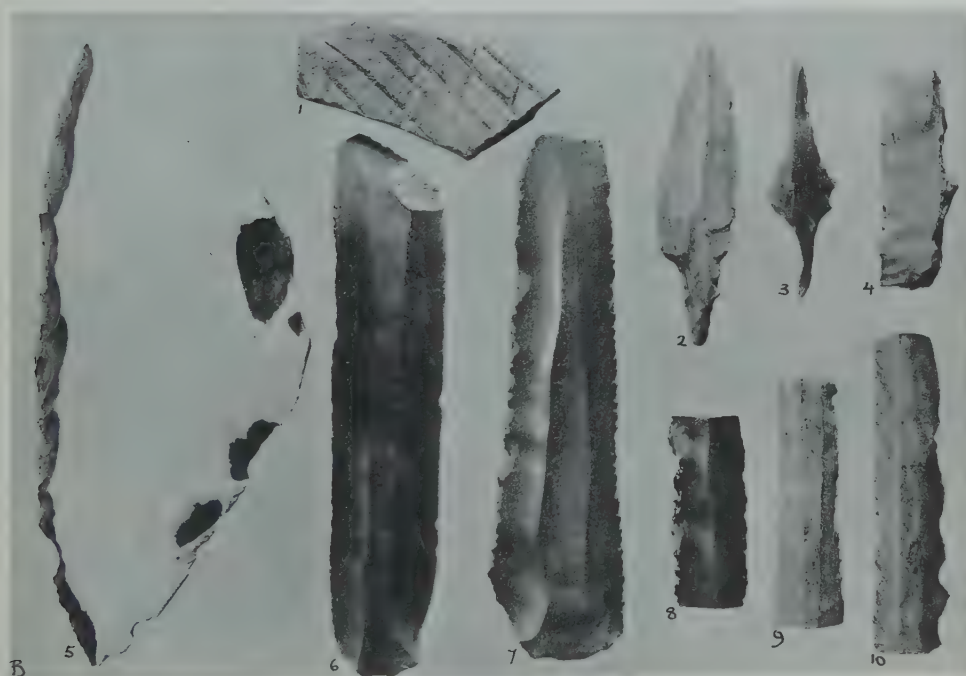
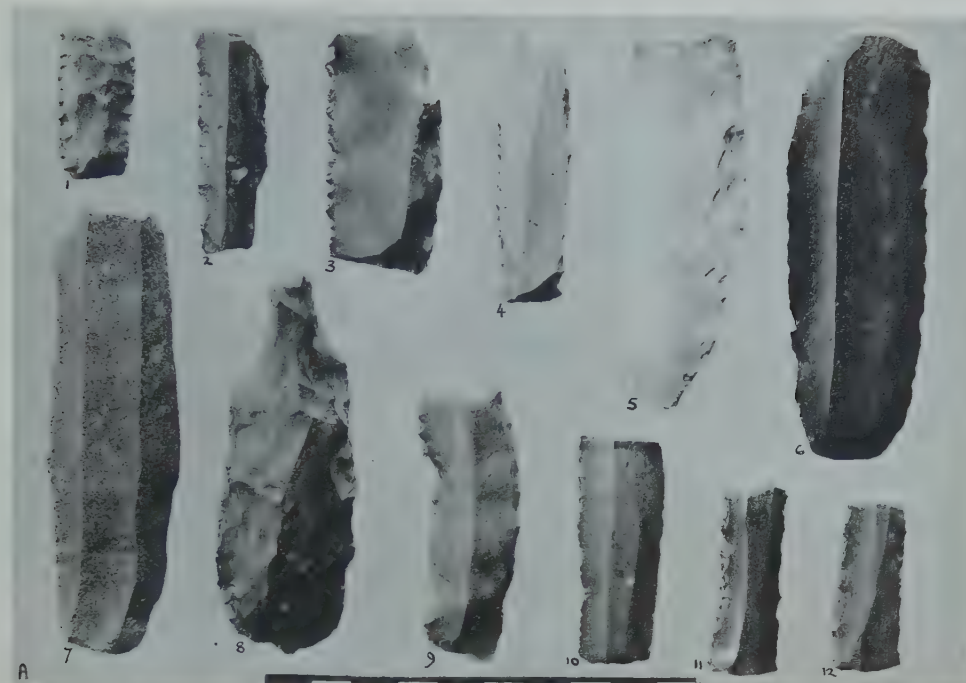
Layer	Arrowheads	Sickle-blades	Fan scrapers	Scrapers	End-scrapers	Core-scrapers	Knives of tabular flint	Celts	Chisels	Gravers	Borers	<i>Lames de dégagement</i>	Core tablets	Blades	Blade sections	Flakes	Cores	Retouched microliths	Obsidian microlithic blades	Microlithic blades	Microlithic cores	Total	Average depth of deposit in metres	
III		2	1																			3	0	
IV		3	2										3	8		8							24	-1
V	1	23	4											10	21	27							86	-2
VI		11	3								1			5	9	7							36	-3
VII		26	17							1	3			20	30	19	5			1	2	123	-4	
VIII	37	243	2	50	7	10	4	1	4	33	54	36	1	312	654	351	70	32	5	402	48	2356	-5	
IX	16	113		24	9	4			1	36	39	58	3	224	624	86	14	2		62	5	1320	-6	
X	28	196		19	3	1			3	56	36	67	12	350	1091	132	22	4		173	5	2198	-7	
XI	56	419		40	5			1	4	165	80	309	38	924	2793	250	81	5	9	332	9	5520	-8	

\* One specimen made of obsidian.

## POSTSCRIPT

THIS monograph concludes the publication of the field reports of the Jericho expeditions which have appeared in the *Annals* yearly since 1932.

We were on this last occasion again indebted to a number of voluntary helpers. Mr. John Buxton and Miss Seton-Williams



JERICHO, 1936.

A. MIDDLE BRONZE: 1-6 AND 9-12, SICKLE-BLADES; 7, BLADE; 8, PICK.

B. EARLY BRONZE (CANANEAN): 1, FLINT INCISED ON CORTEX; 2, ARROWHEAD;  
3, BORER; 4 AND 7-10, SICKLE-BLADES; 5, SCRAPER; 6, BLADE.



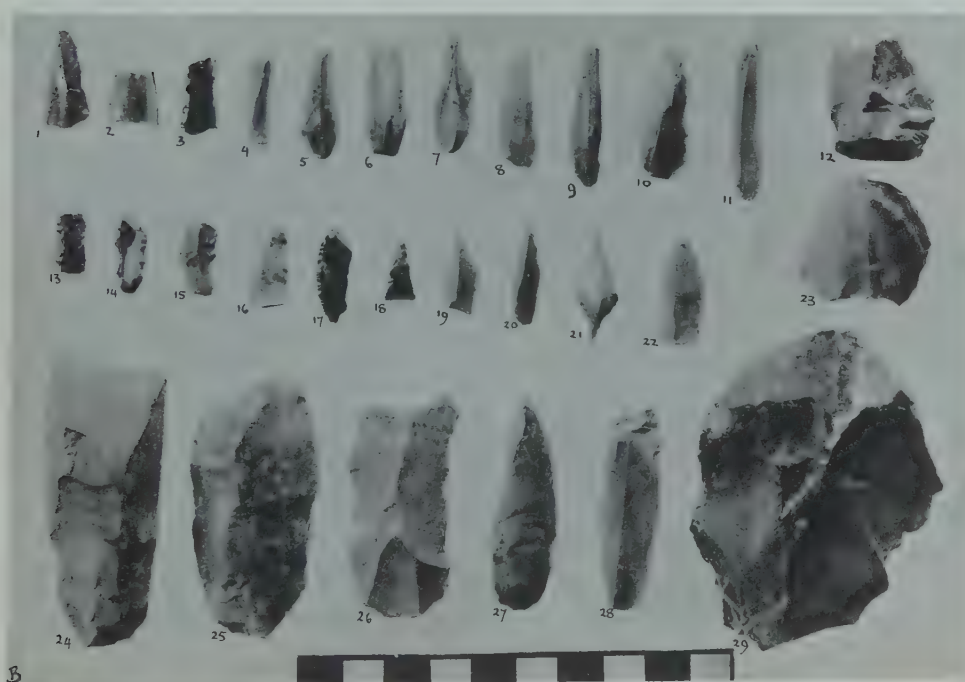
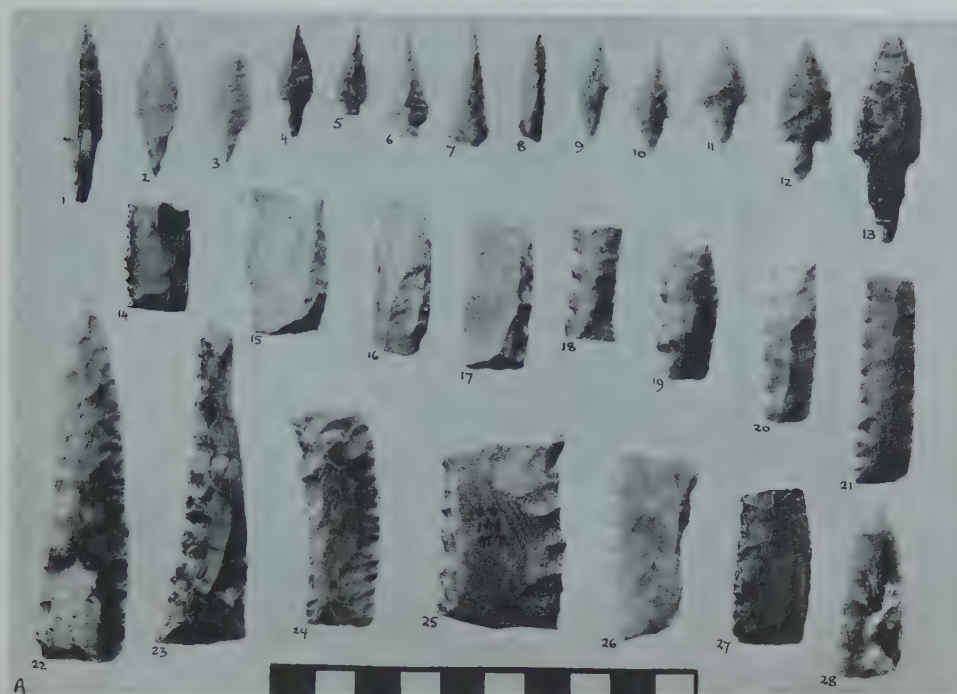




JERICO, 1936.

- A. CHALCOLITHIC (JERICOAN): 1-6, BORERS; 7-10, GRATERS; 11-14, SCRAPERS.  
B. CHALCOLITHIC (JERICOAN): 1, CELT; 2, 3 AND 5, CHISELS; 4, KNIFE.





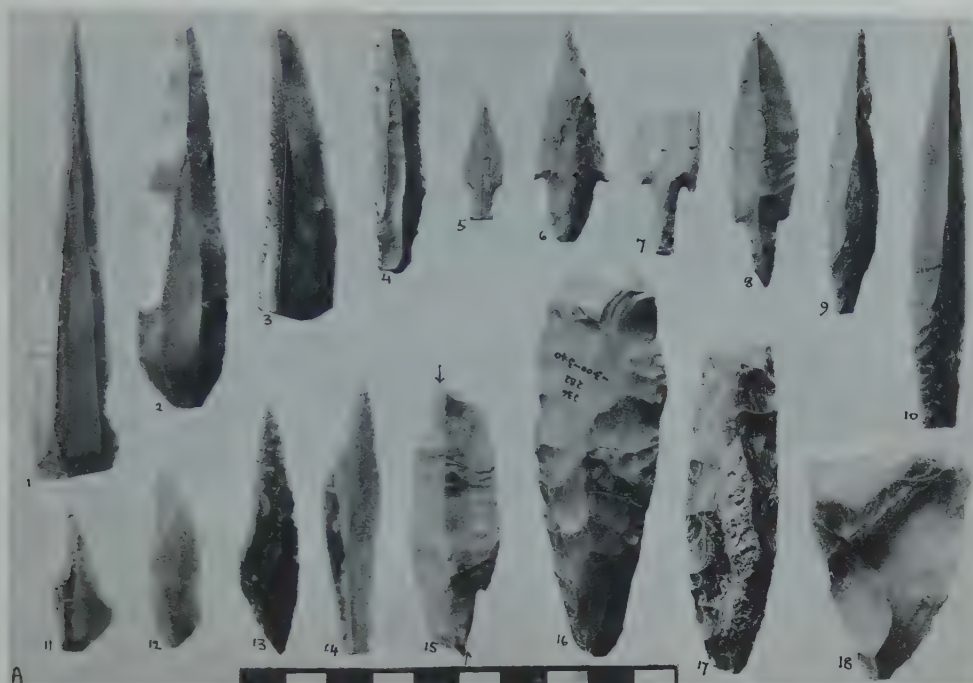
JERICO, 1936.

A. CHALCOLITHIC (JERICOAN): 1-13, ARROWHEADS; 14-28, SICKLE-BLADES.

B. CHALCOLITHIC (JERICOAN): 1, OBSIDIAN BORER; 2 AND 3, OBSIDIAN BLADES;  
4-11, MICROLITHIC BLADES; 12 AND 23, MICROLITHIC CORES;  
13-22, RETOUCHE MICROLITHS; 24-28, BLADES; 29, CORE.





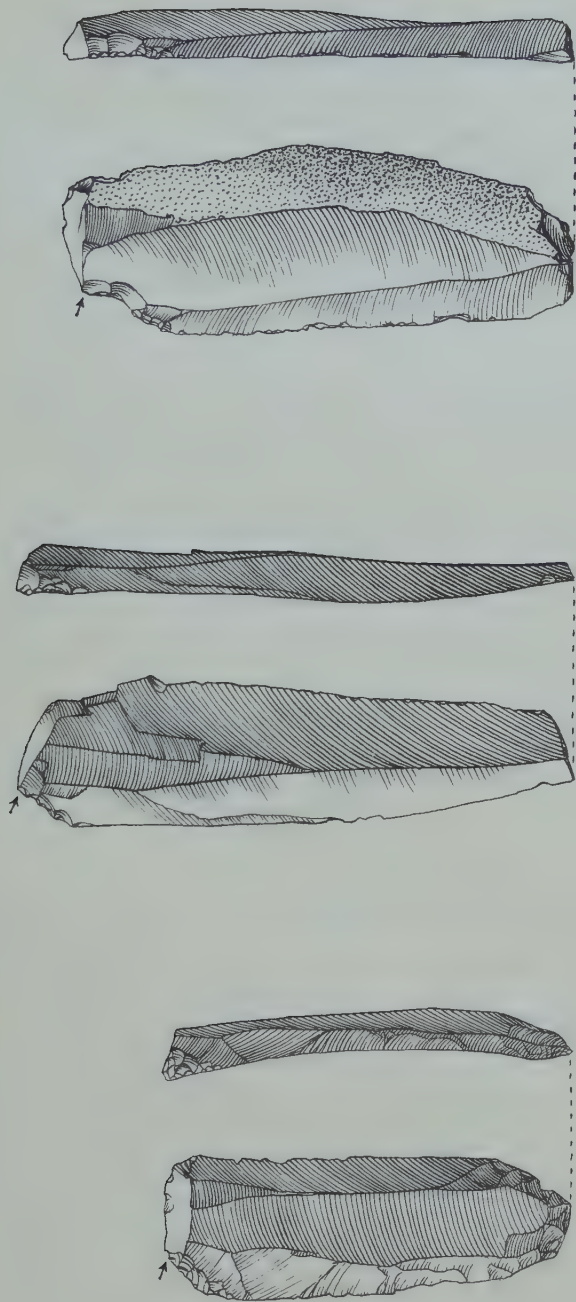


JERICHO, 1936.

A. NEOLITHIC (TAHUNIAN II.): 1-4, SICKLE BLADES; 5-10, ARROWHEADS; 11-14, BORERS; 15, GRAVER; 16 AND 17, CHISELS; 18, CELT.

B. NEOLITHIC (TAHUNIAN II.): 1, RETOUCHE MICROLITH; 2 AND 3, OBSIDIAN BLADES; 4-9, MICROLITHIC BLADES; 10 AND 11, MICROLITHIC CORES; 12-15, BLADES; 16 AND 17, LAMES DE DÉGAGEMENT; 18, CORE.





JERICHO, 1936.  
FLINTS, SCALE 1:1.





assisted Mr. Alan Rowe at separate stages of the field work, and Mr. O. Gurney gave help in the studio photography; Mrs. R. Gurney kept the central register; Mrs. Garstang as usual supervised the camp and laboratory; while, as is evident from their monographs, Mr. G. M. FitzGerald, Mr. I. Ben Dor and Miss Joan Crowfoot made independent archaeological studies in their several fields. The illustrations and arrangement of the Report have been completed by Miss M. Ratcliffe from field drawings made by Boulos Araj.

The expedition possesses detailed records of the excavations, including photographs and field notes as well as type specimens. These have been housed in the Institute of Archaeology and are now at the disposal of all accredited students of the subject.

J. GARSTANG.

## EXPLORATIONS IN CILICIA

### THE NEILSON EXPEDITION: PRELIMINARY REPORT

By JOHN GARSTANG

WITH PLATES XI-XIX

DURING the winter season the Neilson Expedition, working by courtesy of the Turkish Government in collaboration with the Director of the Adana Museum, carried out a survey of the more ancient sites of the Cilician Plain.

A preliminary fortnight spent at Ankara was devoted to a study of the pottery series established by the Chicago Oriental Institute's excavations at Alishar and now exhibited in the Archaeological Museum at Ankara, and also to the examination of a number of prehistoric sites in the vicinity, included among which were Ahlatlibel and an uncharted gravel pit not far from Kalaba. Our observations will be recorded in due course, but one fact is worthy of immediate mention, namely, the location of an extensive outcrop of obsidian, which seems undoubtedly to have been the source of most of the worked obsidian implements so common in the prehistoric sites of Anatolia and northern Syria. This obsidian field lies to the S. of Nevshehr, on the road to Akserai, S. by E. of Karapunar, and relatively near the site of the Hittite inscription of Kara Hüyük: it is reported to be fully three miles wide. Cores and flakes are extremely plentiful, and we have seen one core to which a flake seems to fit. We hope to publish a specialist's opinion on these materials in a subsequent report.

In the museum at Ankara the pottery from Alishar now forms the basis for the study of Anatolian pottery. It is divided into five groups, of which the most ancient is Chalcolithic, and dated c. 3500 B.C. While being archaic in character, comprising a large proportion of black vessels with flat bases, it is distinguished by high burnishing and exceptionally outspayed rims to some of the larger vessels. The second phase is called the Copper Age, ending c. 2400 B.C. The vases still for the most part have flat bases, and the fabrics are mostly red, both

plain and burnished. Handles make their appearance and there is some decoration, both white on red and red on white. Relationship with Troy II is evident. The third group is classed as Early Bronze Age, ending c. 2000 B.C. There has been difficulty in placing this group satisfactorily in the series, but opinion tends to regard it as intruding upon the Copper Age and as overlapping more or less the period which follows. The pottery is unlike all other of the Bronze Age in that it is fully decorated, mostly with linear patterns, some of which are elaborate, black on buff or red, and also dark red on burnished red. Shapes are fully developed, including jugs, spouts and handles. Bases are flat or half-pointed. The pottery, like all that which precedes, is hand-made. The fourth period is called Hittite, and to it is assigned the range 2100–1200 B.C.—that is, to the end of the Imperial period. The pottery is mostly plain, but it is distinguished in technique by being wheel-made, by the variety of form and elegance of the finished products, the rarity—indeed, almost complete absence—of painted decoration which is replaced by high burnish. Tall channel spouts, rising loop handles, strap handles over the mouths of vessels and horizontal handles are all fully illustrated by the series. Pedestals and trefoil spouted rims are also conspicuous. The fifth period is called Post-Hittite. This pottery is also wheel-made, and it includes the highly decorated group called Phrygian, dated approximately 1100–700 B.C. This identification seems to be justified by the most recent excavations at Boghaz Köi, where perhaps an earlier date is to be assigned to this new class of ware. In this, *motifs* include elaborate linear patterns, tending to be square or arranged in panels and to combine with processions of animals, chiefly deer and horses. The shapes are those of the Iron Age.

Further illustrations of the Anatolian wares, surprising in their quality and variety, were found in the Copper Age deposits of Alaya Hüyük, newly excavated by the Turkish Historical Society. An interesting feature is the resemblance of some of the black burnished wares decorated with diagonal flutings, to those found at Judeideh in N. Syria by the Chicago Expedition to Rihanieh and reflected more distantly in a similar class of wares of E.B. iii, which were found in Palestine at Beisan, Jericho, and more plentifully at Kherbet Kerak. The gold jewellery found in the Alaya deposits is beautifully executed. The open-work pattern of the gold tiara recalls strongly the pattern painted



upon sherds from levels 10 and 12 of Tepe Gawra. Similar patterns, as published in the *A.A.S.O.R.*, Vol. IX, Figs. 39 and 76, come from Gawra I—that is, from the earliest period—the numbering being from the lowest stratum.<sup>1</sup>

As far as concerns our Cilician researches, we retain for comparison the nomenclature of groups I-IV applied to the Anatolian series. Instead, however, of using the term Post-Hittite in relation to Cilician pottery, we will use the term Late Hittite, since it is well established by our results that there was no sharp break in the Hittite ceramic series at the end of the Imperial period, as there was upon the Plateau. Some change, it may be said, is noticed after the Assyrian invasion, but the break only becomes conspicuous at the time of the Persian conquest.

We arrived in Cilicia after this preliminary work towards the end of November. Our exploring party included Mrs. Garstang, Miss Veronica Seton-Williams, Mr. John Waechter and, later, Miss Alison Dun, all of whom have contributed to the preparation of this interim report. Our investigations extended eastward as far as Missis and Jeihan (Çeyhan), northward as far as Sis (now Kozan) and westward to Mersin. Our sketch-map on Plate XI indicates this area. The immediate district of Tarsus, where the expedition directed by Miss Goldman is at work, was of course excluded, but particular attention was given to the problem of Anchiale, upon which there was fresh light. The heavy rainfall and floods prevented our completing this piece of our investigations.

The old village sites of the Cilician Plain, like those of Syria, are indicated mostly by earth mounds which here, though relatively small, rise for the most part conspicuously from the plain and are visible from afar. The Turkish word equivalent to the Arabic 'tel' is 'hüyük.' More than a hundred such mounds may be counted inside the area investigated; but for one reason or another, such as the presence of graveyards, mediaeval castles or older ruined villas or farmsteads, a large proportion do not lend themselves to superficial investigation. Quite a number, particularly those near the coast, were found to be thickly overlaid with more extensive Graeco-Roman deposits. There is also another factor which is worth noting. The soil of Cilicia is clayey and tenacious, so that even the abundant rainfall has done little to

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<sup>1</sup> For this reference I am indebted to Mr. I. Ben Dor.

denude the sites. In Palestine and Syria, by contrast, where the soil is more loamy and the sharp rains of winter are followed by months of drought, denudation has been continuous, so that half an hour spent near the foot of the mound will suffice to secure a broad outline of its history. It was for reasons such as these that only a small proportion of the mounds visited gave us positive results.

Prehistoric remains (Bronze Age and earlier) were found in the north-east on the road to Kozan (Sis), at Imamoglu, on a small mound to the north of Jeihan, and in the extreme west at Chaïshli, about six kilometres north of Mersin. Good Hittite deposits were found at Hajilar and Yarim, also on Tilan Hüyük, which lies about fifteen kilometres from Kozan. In these three cases Roman remains were plentiful on the surface. At Yarim the river has cut a section of the mound and the deposits embedded in the side were stratified. They seemed to reach to the earliest Hittite times in the Bronze Age, and the whole deposit was approximately nine metres thick. Late Hittite deposits were present at Injirlik, Körtjular, and Hajilar; but on Merjin Hüyük nothing but Graeco-Roman remains could be found.

These places are indicated on our sketch-map of the area. The notes we have made are available to any interested student, and the potsherds collected have been arranged for study in a room set apart for the purpose by the Director of the Adana Museum, where also may be seen the specimens collected on a similar tour by Miss Goldman. Dr. Gjerstad's instructive notes on potsherds from some of these sites are already published. (*Rev. Arch.*, III, 1934, pp. 155 ff.)

Two considerations seemed to emerge from these preliminary investigations. Most of the old Hittite sites, though occupied for several hundred years longer on the Cilician Plain than upon the Hittite plateau of the interior, seem to have been abandoned finally after the Persian conquest. The intensive revival of Graeco-Roman times bears witness to a different economy and outlook, partly due to prodigious engineering feats which brought water by aqueducts to more favoured places, partly to the relations with the sea. Even where a new settlement sprang up in an old Hittite district it usually avoided the old site, as may be seen at Sirkeli, where abundant Hellenistic traces were found in a low mound, cut through by the railway, not three hundred yards away from the deserted Hittite city by the riverside. Along the coast, from Ayas to Karaduvar, the numerous places that came into being and

prospered in the Greek and Roman periods occupied fresh ground on big rocky promontories, or on sandhills of relatively recent formation. It may be noted, in conclusion, that in the southern plain of Adana, between the Jeihan and the Seyhan Rivers, no ancient mounds telling of a Hittite occupation are to be seen within twenty-five kilometres of the coast. It would appear that all that now fertile area is a more recent gift of those rivers and the sea : the process is still at work, and it accounts for the silting up of the port of Tarsus and the obliteration of the remains of Anchiale.

The other fact which had made itself obvious, was that no complete estimate of the historic values of the sites of the plain around Adana could be obtained without removing the surface soil. This, the Director of the Adana Museum was enabled to do, and it is due to this facility that we obtained a much clearer insight into the archaeology of four particularly attractive sites, one of which was selected for further systematic excavation.

#### CHAÜSHLI HÜYÜK

CHAÜSHLI HÜYÜK lies about six kilometres to the NW. of Mersin on the east side of the road towards Chaüşli and about one kilometre to the N. of the village of Christian Köi (cf. Plate XII). Standing as it does on the very edge of a scarp which descends steeply to a small stream, the mound, as seen from the other side where runs the road, appears prominent, but from the platform upon which it stands it is seen to rise gently and to be not more than five to six metres in height. The mound consists of a raised but still low area crowned by a small, steep knoll, standing on a low ridge which extends and widens eastward and comprises about two acres of ground.

Pottery was littered over the whole surface of the area, but most thickly in the immediate vicinity of the knoll. It included very few late pieces ; we have, in fact, recognised only one Roman fragment. There were numerous Hittite pieces, some, or perhaps most, of an early character, and this is borne out by the scarcity of painted fragments, which were confined to the simple linear decoration or red-wash of the earlier Hittite phase. A curious fabric, which requires further investigation, is a hard, brick-red ware which contains mixed grits and is hand-made, with a rough surface. One specimen of this fabric took the form of a vertical neck, 10 cms. in height, belonging to a jar

the shoulder of which was indicated. The vessel was early in shape, but not primitive in texture or baking. There was also a circular stamp on the inside. The remaining surface fragments included several pieces, obviously of the Iron Age, mixed with the earlier Hittite. There were also numerous sherds of primitive pottery :—

- (1) Black faced wares, burnished on one or both sides.
- (2) Double-burnished brown ware.
- (3) A primitive holed-lug horizontal handle.
- (4) Several pieces of light grey soapy ware.

Other finds included pieces of worked granite in considerable variety, but too broken to give us their original forms ; and also a relatively large number of obsidian fragments, both cores and flakes, and a few damaged implements.

Our investigations were directed to determine :—

- (a) The period of the upper part of the knoll.
- (b) The period of the raised platform upon which the knoll stands.
- (c) The extent and character of the prehistoric area of which there was so much superficial indication.

We were not successful in obtaining any conclusive results, but as this site has already attracted attention (Gjerstad, p. 158 ; also *Annals*, XX, 1933, pp. 46 ff.), and we shall not necessarily do further work upon it, we deal with it in some detail.

*Trench A*, on the top of the mound, only removed the surface soil, for we came on a large stone wall and the remains of a burnt level, and abandoned the trench.

*Trench B*, further down the slope, was carried to a depth of 160 cms., but the material it contained was mixed, the only change being a slight increase in burnished wares at the lower levels.

*Trench C*, on the ridge some distance from the knoll, reached natural rock after only 60 cms. Here Hittite wares predominated with a few hand-made early fabrics.

*Trench D* had a stone floor at the depth of 80 cms. and an earth floor at 120 cms. ; but the pottery remained mixed in character until 160 cms., where there was a sealed deposit of grey clay, 20 cms. thick, overlying the natural rock and containing hand-made fabrics, thick and badly baked, with straw as well as grits.



*Trench E*, on the other side of the knoll, went to a depth of 250 cms. without reaching natural soil. The pottery was Hittite, and exhibited no earlier characteristics save one piece of red double-burnishing.

The almost complete lack of stratification in these trenches favours the division of the pottery on the broad lines of Hittite, Proto-Hittite, and Prehistoric, rather than by their relative positions in the mound.

#### HITTITE

Both on the surface and in the trenches Hittite wares predominated—not the late pedestal cups, but plain fabrics, cooking pottery and the metallic wares such as we found at Sirkeli in Trench E, in the fourth metre.

*Fabrics.* These included most of the common early wares:—

(a) Brick-red ware, with a white gritty core, wheel-made and wet-smoothed on the outside.

(b) Metallic wheel-made wares, common both at Kazanli and Sirkeli, with grey-brown exterior, rough surface and red or grey gritty core. These occurred in Trenches A, B, and E.

(c) The typical light yellow-to-brown burnished Hittite fabric, with closely packed core of the same material, which was particularly noticeable in Trench B.

(d) The typical Hittite cooking pottery, brown-grey, often unevenly fired, and containing large grey or white grits. This was present in all the trenches.

*Rims.* (1) The most common rim was that of the everted stumpy-necked globular cooking-pot, which occurred in all the trenches, in varying tones of brown to grey, sometimes hand-burnished, but more often plain, with a gritty brown core.

(2) A single late Hittite shallow dish from Trench E-190. It was of grey gritty compact clay, wheel-made, with traces of paint on the inside of the rim, which was itself inturning and slightly grooved.

(3) Part of a shallow Hittite dish from Trench D-60, with a plain upcurved rim, of yellow paste, close gritless core, and with a wet-smoothed exterior.

(4) A shallow carinated bowl, covered with brown washy paint on a close Hittite brown core without grits, from Trench D-110.

The main types of rim fabrics were thus fairly evenly distributed, although commonest in the trenches in the mound itself.

The only spout was from Trench D-60, a typical Hittite upturned form in reddish brown burnished ware, with a plain light yellow interior paste, which continues through to the core.

*Handles.* These may be classified into three main divisions :—

(a) The most common, as was to be expected, were the vertical loop handles, circular in section of brown, grey or red half-smoothed ware. These, a typical Hittite form, occurred all over the mound, and in many cases were fastened to the pot by the core, which was formed into a point and pressed into the still wet clay forming the body of the pot.

(b) Another common Hittite form was the strap handle, slightly more oval than usual, and occurring chiefly in Trenches B and D. The ware of which it was made was generally dark red to brown with a grey gritty core.

(c) There was also a single example of the lunate ledge handle, so common at Kazanli, in Trench D-100/200. This specimen was broken and came from under the earth floor of Trench D-120. A single handle of crater type with a square shoulder was also found, but as this came from Trench A, it is probably of Post-Hittite date.

*Bases.* These took common Hittite forms, being flat and mostly of yellow gritty or brown gritty ware, though in Trench C-60 a single broken ring base occurred.

*Painted Wares.* These were very rare and consisted mainly of two types :—

(i) Some brown linear designs on buff paste over a gritty core.

(ii) Red or yellow paint on a buff ground.

A single piece from Trench E-60 had a brown hatched design, and from Trench B there was a painted vertical loop handle of usual shape.

*Incised Ware.* The only incised ware worthy of notice was a comb design from Trench B-30, of brown paste on a grey core. A similar ware occurred at Kazanli in a Hittite context.

#### PROTO-HITTITE (OR BRONZE AGE)

The only wares which may be regarded as Proto-Hittite or even earlier, but which look like forerunners of the later wares, were a series of red double-burnished fabrics, on a grey core, often mottled through being unevenly fired. These occurred throughout Trenches B, E, and to D-120. These wares resembled those found at Kazanli at the base of the rampart in Trench A-400.

## PREHISTORIC

This may be divided into two main classes :—

(1) The burnished wares, which are grey, black or brown, are usually thin, well baked, hard and compact with a gritty grey core. The texture of this ware is very fine and the burnish high, so that it compares favourably with other early fabrics. The forms are usually the straight rims of 'flower-pot' vessels with flat bases. Its closest resemblance is to the grey wares of Sakjegeuzi, but the other wares usually associated with it are absent.

(2) The second type is much more unsophisticated and primitive in appearance. It consists of thick hand-made pottery, the exterior of which is yellow or brown over a grey core, containing both grits and straw. As no large fragments have been found, the forms are difficult to reconstruct, though it would seem, from the absence of flat bases, that the vessels were crude 'hole-mouthed' jars with rounded bases.

These wares were both present in the stratified area in Trench D, although only the more primitive type occurred at the very bottom of Trench D-160/180, accompanied by one painted fragment with black bands on a light buff burnished slip over a gritty yellow paste. No handles were discovered stratified. The only ones which may belong to the earlier period are several incipient ledge handles discovered in Trenches A-30, B and D, but these are too mixed with later material to be of much value.

In conclusion, the pottery of Chaüşli must be regarded in the following light. It points to an early settlement with hand-made fabrics and burnished wares, dating probably from the late Neolithic to Chalcolithic periods, an individual culture without connection with the Anatolian plateau, but with probable connections eastwards. No definite Bronze Age culture was apparent, the few fragments of double-red burnish which we found being too scarce to admit of a settlement of that period. It seems, then, that the area was deserted from pre-historic times until the Hittite period, when possibly a small fort was placed on the knoll. The position was apparently relinquished before the Imperial Hittite period, as none of the well-known late forms of Hittite ware were present. The absence, however, of painted wares, and the preponderance of plain pottery, would probably be explained by the fact of it being a garrison post rather than a settlement, and

the discovery of the thick stone wall in Trench A, at the top of the mound, seems to bear out this theory. Our investigations were not extensive enough to enable us to form any definite conclusions about Chaüşhli, but indications make it possible that the prehistoric settlement will be discovered by trenching more deeply along the edge of the scarp. It may indeed be underneath the knoll itself, but in that case it would be difficult to account for the obsidian and prehistoric fragments found scattered over the wider area.

#### THE OBSIDIAN INDUSTRY AT CHAÜSHLI HÜYÜK

The following notes are supplied by Miss Seton-Williams :—

Obsidian was discovered lying about the surface in quite large amounts. It consisted mostly of chips and flakes with a few worked implements. The preponderance of fragments and flakes suggests the proximity of an ancient working floor, as unfinished tools would be unlikely to be removed purposely from their place of origin. The material of which the tools are made consists usually of black transparent obsidian with a highly glassy surface. In some cases, owing to weathering and the chemical action of the soil, this has become opaque, while the surface has assumed a dull grey appearance. There also occurred several fragments of brown flint, and brownish grey chert in various trenches, usually in the form of sickle-blades.

Owing to the disturbed nature of the soil, due to ploughing and erosion, there was no stratification except in one trench, which did not yield obsidian in its stratified layers; we are therefore treating the whole of the obsidian found together as one entity, since the workmanship is all of one period.

*Blades.* These were by far the most common obsidian tools found. No whole blades remain, the average length of the blade section being about 2 cms. The secondary working is in all cases poor and the flat retouch absent. The blades are usually worked upon both edges, and the presence of a slight lustre on several suggests their use as sickle-blades. In some cases the working is so slight as to be a mere bevelling along the edge, while in others it exhibits a coarse denticulation.

*Gravers.* These are usually made at the end of broken blades, usually single faceted, and fairly well made.

*Borers.* Of these, there were only three, which are also portions of reworked blades. One found near the surface was rechipped after



the implement had been exposed to severe weathering, as the retouched end defining the point is the only part of the tool showing the glassy obsidian surface.

*Scrapers.* A broken end scraper,  $4\frac{1}{2}$  cms. in diameter, is the largest. It is steeply worked on the end and sides, while the surface is much weathered and scratched. There is also a small hollow scraper of clear obsidian, very evenly flaked, at right angles to the bulbar face, and some  $2\frac{1}{2}$  cms. long. The other scrapers are small converted blades, poorly worked.

*Cores.* These are usually small and rather battered.

*Conclusion.* There are not really enough worked artifacts at Chaüşli to allow a satisfactory classification, and on the whole the industry exhibits a very poor workmanship. The absence of flat retouch, the paucity of arrowheads, and the general unfinished appearance of the obsidian work, suggests that it belongs either to a poor local culture, or to the late Neolithic or Chalcolithic period: a transitional phase after the introduction of metal had spoilt and degenerated, though not ended, the art of stone working.

## MERSIN

SOUK SÜ. Mersin Hüyük stands attractively at the bend of the Souk Sü (Cold Water), not more than a mile outside Mersin towards the NW. It is a bold mound, possibly twenty metres high, but it stands on low ground, and for this reason, possibly, has not attracted much attention, though Dr. Gjerstad recognised the interest of its surface pottery (*op. cit.*, pp. 164 ff.). The river is encroaching upon the mound, and although there is no bared section as at Yarim Hüyük, the result of the constant erosion has been to bare the ends of the different strata, so that in digging on that side we were able rapidly to ascertain the nature of the stratification and to collect some very informative pottery fragments. These are illustrated on our Plates XIII-XVII, where also may be seen diagrams showing the sections cut, which illustrate the relative positions of the fragments in the ground.

Four trenches were cut in all: A, B, C and D; A being at the foot and D nearing the top. The two uppermost trenches illustrated the Hittite period; and, as we have applied for permission to excavate this site, we confine our present notes and illustrations to the pottery found in the lower half of the mound, which is unique amongst those

which we have examined. Time has not permitted a comparison of the fabrics and decorations, but at first sight it would seem that the culture illustrated by the painted pottery from the lower part of Trench B finds resemblances in the middle levels of Arpachiyah. The pottery found in the upper part of Trench A, though not stratified, is so much more rudimentary in character, particularly in the early attempts at decoration, that it seems indubitably to belong to an earlier period than that of Trench B. It is to be noted that, as shown in the diagrams on Plate XIII, the stratification was relatively intact in Trench B below the 2-metre line, and in Trench A below 1.70 m., these depths being taken from the head of the trench in each case.

In the depths of Trench A a more primitive culture is illustrated (Pl. XIII), and, with one exception (which may be regarded as doubtful), it contains no painted fabrics. This culture seems to have affinity with the earliest levels of Sakjegeuzi, and doubtless will be traced through a wider area,<sup>1</sup> though it seems in several ways to be distinct from the earliest culture of the plateau. Subsequent investigations showed that this earlier culture extended beyond the confines of the Hüyük proper, and it thus lends itself to ready investigation in the coming season. As the materials are fragmentary, we limit our notes in this report to the description of the fabrics which may enable the character of the pottery to be recognised. These will be found opposite their respective Plates. Miss Seton-Williams kindly supplies the following notes upon

#### THE OBSIDIAN AND FLINT INDUSTRY AT MERSIN HÜYÜK

Both flint and obsidian appeared in small quantities on the surface of the mound, the obsidian being of a particularly transparent variety. No tools except a few sickle-blades of brown flint were visible on the surface.

The lowest trench in the mound, Trench A, had at its deepest point, A-320—I-30, a solitary buff chert sickle-blade, with rough denticulation upon both edges, which were slightly lustrous. The obsidian from the level above this, A-240/300 cms., had a curious clouded effect on its surface, due probably to the effects of burning, of which traces appear in the section as the white ash level. The only tools here were three fragments of blade sections some 2 cms. long, one of which was slightly

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<sup>1</sup> Dr. Sidney Smith aptly indicates a close relation between some of the hard burnished fabrics with those of Uruk.

notched at one end, perhaps for hafting. The flaking in all cases was confined to the edge of the tool and did not cover either face. Above A-120 the soil was unstratified, and the flint flake and broken sickle-blade discovered there cannot be regarded as *in situ*.

In the next trench, B, at a depth of 300 cms., the lowest piece was found, a broken blade  $4\frac{1}{2}$  cms. long. This was also notched at the bottom end, the obsidian being grey and slightly opaque. The rest of the obsidian in the trench consisted of a few unworked flakes, while the two upper trenches, C and D, contained no obsidian of any description.

From the above account two things become clear. In the first place, type tools have not been found in sufficient numbers at Mersin to make possible a satisfactory statement about the industry. Secondly, the obsidian occurred only at the base of the mound in the prehistoric levels, in association with the painted and plain wares already described. From this it may be inferred that the industry itself was an early one, but until further investigations are made, no definite conclusion as to its date and its affinities can be formed.

#### KAZANLI

Kazanli Hüyük, a medium-sized, isolated mound rising conspicuously from the alluvial plain between Mersin and Tarsus, about sixteen kilometres from the former, gave rich evidence, in the course of a few days' work, of a long range of Hittite cultures from 2500 B.C. (E.M. ii) down to an advanced date in the Iron Age, when it may be supposed Hittite political history closed. Graeco-Roman remains were sparse, and this fact, coupled with its distance from the sea (now about two miles), seems to preclude all possibility of identifying it with Anchiale or a later port of Tarsus, as has sometimes been surmised. Valuable materials were obtained, and these will be published in our next report.

#### SIRKELI

Sirkeli Hüyük, a very large site, placed in a bend of the Jeihan Sü (the Pyramus), seven kilometres from Missis in the eastern plain, comprised two main features: a high mound abutting on a rocky point, and a lower extensive terrace flanking its western side. The terrace contains four and a half metres of stratification representing

Hittite history, from an early date in the Imperial period down to the bucchero period of the Cypriote Iron Age. On the hill proper, settlement seems to have continued through the Cypriote geometric period. Possibly on the terrace itself the later element was originally present, but we have no evidence as to the origin of the terrace, which may be due to relatively modern agriculture. At its southern end the discovery of a somewhat crude stone lion suggests a late Hittite survival, while a rock carving and inscription, described by Dr. Güterbock in this report, bear witness to some special activity in the Imperial period.

Our copies of this carving were made under conditions of considerable difficulty owing to the flooded state of the river, and it may therefore be necessary to publish a revised copy; but, in the main, they may be regarded as substantially correct.<sup>1</sup> There is some suggestion of an emblem, possibly a winged solar disc, centred over the dagger (no. 8) and reaching as far as the signs numbered 5 and 9. At the very beginning, between 1 and the royal head, there may also be something to add, while at the very end, after number 11, the markings are indefinite, as we were unable to see them, our precarious platform not extending far enough. The reading of number 1 as a bull's head is due to Dr. Güterbock and is based upon his incomparable knowledge of the contemporary hieroglyphs of Bogazköi.

The presence of an Imperial Hittite monument south of Taurus is a welcome light upon the military and political organisation of the Hittite Imperial line. If Dr. Güterbock is right in assigning this monument to the period of Muwatalli, and all agree with him, then it would appear that, for the conquest and organisation of Syria, the Hittite kings adopted the road through this site as one of their strategic lines of communication. This road leads directly northwards by way of Feke and the defile of the Geuz Sü through Taurus to Kaisaria, so connecting directly with the Hittite capital; while to the east and south-east it leads by the pass of Bogche over Amanus and around the coast into the plains of northern Syria. The site itself indicates the most imposing Hittite city on the coastal highway, which has led through all time by way of Mersin, Tarsus, Adana, and Missis, towards the east.

We have received much help in the course of our investigations

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1. Cf. Plates XVIII, XIX, and the fig. on p. 67.



from the Director of the Museum at Adana, Ali Riza Yalgan, who also secured plasticine impressions of the hieroglyphs at Sirkeli, by which our copies have been checked. It is a pleasure, also, to recall the help and unvarying courtesy extended to our expedition by all the Turkish authorities with whom we were brought into contact.

## BEMERKUNGEN ZU DER HETHITISCHEN HIERO- GLYPHENINSCHRIFT VON SIRKELI

VON HANS GUSTAV GÜTERBOCK, ANKARA

1. *Identifikation der Zeichen.* Ohne weiteres klar sind die Zeichen Nr. 5-11 :—

Nr. 5 : ' Grosskönig ' ;

Nr. 6 : ' Gesicht ' (Profil, nur die Kontur) ;

Nr. 7 : ' Vase ' ; Nr. 6 und 7 bilden zusammen eine häufig belegte Gruppe ;

Nr. 8 : Ligatur aus einem Dreieck mit unten angesetztem kleinem Strich und ' Messer ' ;

Nr. 9 : Wieder Königszeichen, aber ohne Volute ;

Nr. 10-11 : Wieder ' Gesicht ' und ' Vase. '

Rechts von Nr. 11 biegt die Felswand nach hinten um und war daher nicht erreichbar ; daher konnte nicht festgestellt werden, ob die Inschrift sich noch weiter fortsetzt.

Schwieriger war die Identifikation von Nr. 1-4, und bevor wir auf diese eingehen können, müssen wir eine Deutung des eben besprochenen Teils der Inschrift versuchen.

2. *Erklärung von Nr. 5-11.* Die beiden Königszeichen Nr. 5 und 9 bilden *nicht*, wie man zunächst denken könnte, die sog. Aedicula ; das ergibt sich nicht allein aus dem Fehlen der Volute bei Nr. 9 (sie könnte auch nur durch Verwitterung verschwunden sein) sondern vor allem daraus, dass die Gruppe 6-7 nicht in der Aedicula stehen kann, sondern stets dem Königsnamen folgt. Sie bezeichnet einen Titel oder ein ständiges Beiwort der Könige, dessen nähere Bedeutungsbestimmung noch nicht gelungen ist.<sup>1</sup> Die Blickrichtung von Nr. 6 und 10, die

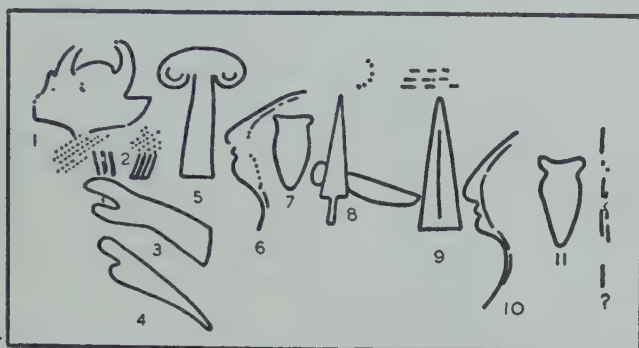
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1. Literatur bei : Bittel und Güterbock, Boğazköy (*Abhandlungen der Preussischen Akademie d. Wiss.*, 1935, Nr. 1), p. 68, n. 2.

mit der des Reliefs übereinstimmt, zeigt an, dass die Inschrift von links nach rechts zu lesen ist. Die Ligatur Nr. 8 ist auch in einer Inschrift am Karadağ<sup>1</sup> belegt und repräsentiert sicher einen Königsnamen. Da nun Nr. 5-7 und Nr. 9-11 übereinstimmen, muss das, was links von Nr. 5 steht, entsprechend Nr. 8 ebenfalls ein Königsname sein. Danach können wir die ganze Inschrift analysieren:—

Erster Name (Nr. 1-4), 'Grosskönig' (5), Titel (6-7), zweiter Name (8), 'König' (9), Titel (10-11).

In welchem Verhältnis die beiden Könige zueinander stehen, ist



zunächst nicht klar; am nächsten läge, dass der erste als Sohn des zweiten bezeichnet wird; dann müsste das Zeichen 'Sohn' in der, wie gesagt, unzugänglichen rechten Verlängerung der Inschrift gestanden haben. Aber das bleibt unsicher, und wir werden auf diese Frage noch zurückzukommen haben.

3. *Zu den Zeichen* Nr. 1-4. Nachdem sich aus der Analyse des klaren Teils der Inschrift ergeben hat, dass diese vier Zeichen einen Königsnamen enthalten müssen, kommt uns nun für ihre Identifikation ein 1936 in Boğazköy gefundenes Königssiegel<sup>2</sup> zu Hilfe. Dass die ersten Zeichen der Inschrift mit den vier Zeichen auf diesem Siegel übereinstimmten, fiel mir bei Betrachtung von Photographien auf, die mir Prof. Garstang freundlicherweise geschickt hatte, und bei einem gemeinsamen Besuch in Sirkeli konnte ich mich von der Richtigkeit der Identifikation überzeugen. In der obigen Zeichnung sind die Zeichen so wiedergegeben, wie ich sie am Original gesehen habe. Dass

1. Letzte Edition: Hrozný, *Archiv Orientalní*, VIII (1936), Pl. 29.

2. Veröffentlicht in *Mitteilungen der Deutschen Orient-Gesellschaft*, Nr. 75 (1937).

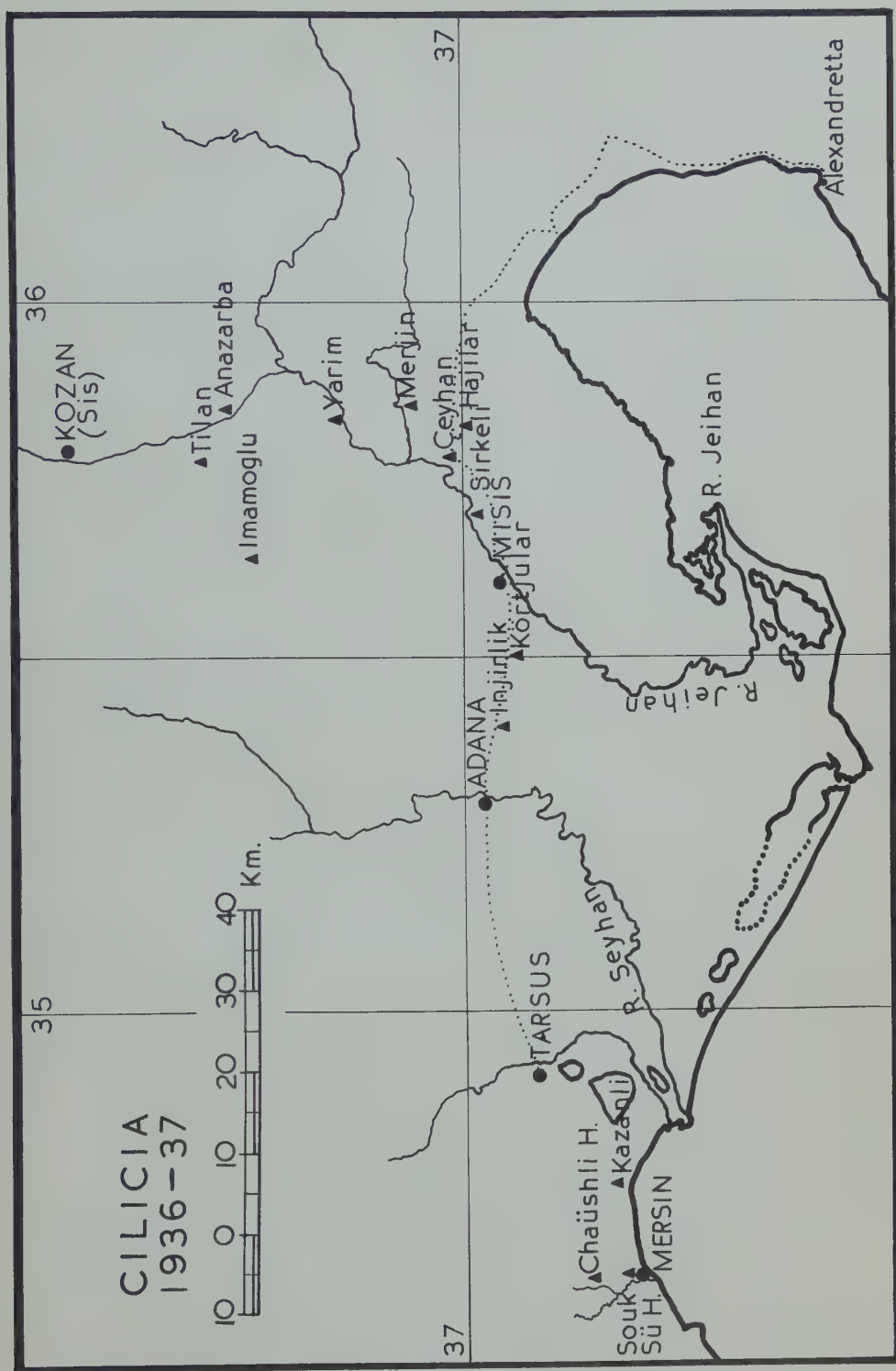
bei eine so stark verwitterten Inschrift die Kenntnis dessen, was dastehen muss, nicht nur eine Hilfe, sondern auch eine gewisse Gefahr bedeutet, darüber bin ich mir durchaus klar; ich glaube aber trotzdem mit gutem Gewissen sagen zu dürfen, dass die vier Zeichen so dastehen: 1: Stierkopf; 2: vier Striche, von denen je zwei parallel sind, die beiden Paare aber nach unten zusammenlaufen; 3: Unterarm mit Hand; 4: Messer.

4. *Zur Interpretation der ganzen Inschrift.* Obwohl alle Zeichen klar und beide Königsnamen auch sonst belegt sind, bereitet die Inschrift doch Schwierigkeiten. Für den ersten Namen habe ich auf Grund der Siegel aus Boğazköy die Lesung Muvatalli vermutet, ohne sie jedoch beweisen zu können; und bei Nr. 8 ist die Frage offen, ob die beiden Zeichen in Ligatur dasselbe bedeuten, wie untereinander stehend. Untereinander geschrieben stehen sie für Urḫi-Tešup.<sup>1</sup> Wenn man einmal versuchsweise annimmt, dass Nr. 1-4 Muvatalli und Nr. 8 Urḫi-Tešup heisst, dann kann der erste König nicht als Sohn des zweiten bezeichnet werden (Muvatalli war der Vater des Urḫi-Tešup!); in diesem Falle wäre also *nicht* am Ende der Inschrift 'Sohn' zu ergänzen, sondern die beiden Namen ständen nebeneinander, ähnlich wie auf den Siegeln aus Boğazköy, und man müsste wie dort annehmen, dass Muvatalli als Grosskönig und Urḫi-Tešup als Mitregent nebeneinander genannt wären.<sup>2</sup> Da in dem Relief nur eine Person dargestellt ist, wäre das immerhin auffällig. Hält man dagegen daran fest, dass die Inschrift nach dem Schema 'X, Sohn des Y' gebaut ist, dann wäre die Ligatur Nr. 8 das bisher unbekannte Zeichen für Muršili—vorausgesetzt wiederum, dass die Gleichsetzung von Nr. 1-4 mit Muvatalli stimmt!—Denkbar wäre endlich auch die folgende Auffassung: 'Dem Muvatalli, dem Grosskönig (hat) X, der Unterkönig (dies geweiht).'

Aber genug von solchen Spekulationen über eine Gleichung mit zu vielen Unbekannten! Begnügen wir uns mit der Feststellung, dass das Relief von Sirkeli, das schon nach seinem Stil in die Zeit des Grossreichs gehört, einen König nennt, der auch auf den Siegeln von Boğazköy vorkommt und dass dieser König mit einiger Wahrscheinlichkeit Muvatalli ist. Eine Antwort auf die offenen Fragen kann nur von neuem Material erwartet werden.

1. Vgl. Bittel und Güterbock, *l.c.*, pp. 64 f.

2. Vgl. *Mitt. d. Dtsch. Orient-Ges.*, 75 (1937).



CILICIA, 1936-37.  
AREA EXPLORED BY THE NEILSON EXPEDITION.





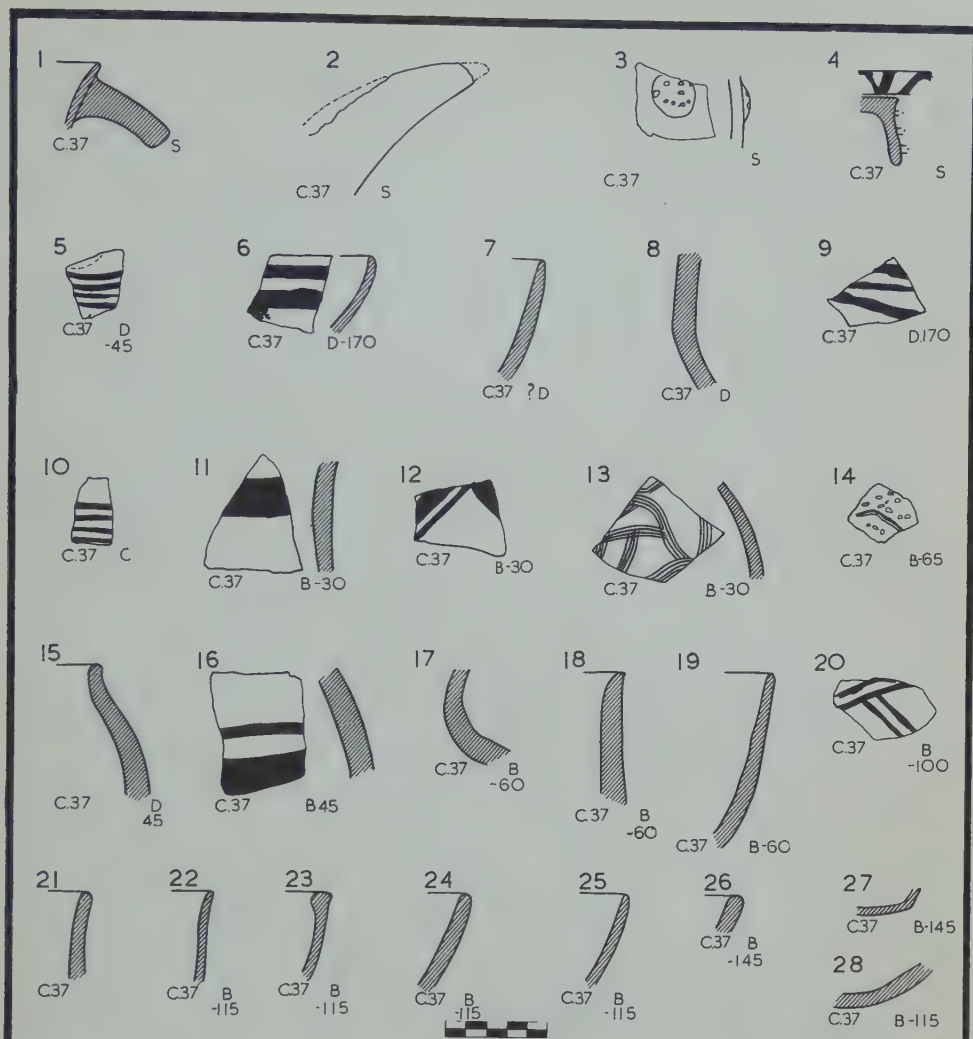
# CHAÜSHLI, 1937.

## DESCRIPTION OF FRAGMENTS ON PLATE XII.

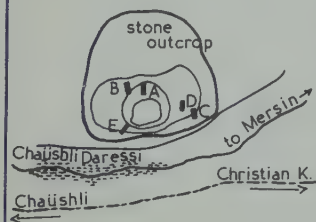
- |  |         |
|--|---------|
| 1. Bricky clay ; roughish.   | S.      |
| 2. Brick ware.   | S.      |
| 3. Buff ware.  | S.      |
| 4. Buff ; dark red paint.  | S.      |
| 5. Yellow almost gritless.   | D. 45.  |
| 6. Yellow gritless ; smooth yellow surface ; black paint.                              | D. 170. |
| 7. Grey gritless ; grey surface ; bnd. ext.  |         |
| 8. Rough ware ; gets thin towards the bottom.  | D. 160. |
| 9. Grey fine grits ; buff surface ; dull int. ; smóoth ext.                            | D. 170. |
| 10. Warm buff ; dark brown paint.  |         |
| 11. Almost gritless ; rough holey int. ; yellow wet-sm. ext. ; dark red paint.         | B. 30.  |
| 12. Buff gritless ; rough int. ; yellow slip bnd. ext. ; dark red paint ; tiny holes.  | B. 30.  |
| 13. Dark grey, some grits ; slip-sm. ; baked brick red ; incised lines.                | B. 30.  |
| 14. Dark, rough ; punctuated ; and incised.  | B. 65.  |
| 15. Black, red surface ; gritty ; bnd. int. and ext. ; h.m. ; uneven.                  | D. 45.  |
| 16. Grey, some small grits ; rough pinky int. ; yellow slip, dark chocolate paint ext. | B. 45.  |
| 17. Black ; half sm. int. ; cream yellow slip bnd. ext. ; h.m.                         | B. 60.  |
| 18. Black, gritty ; reddened surface ; pinky cream wet-sm. ext.                        | B. 60.  |
| 19. Black ; dull bnd. ; h.m.   | B. 60.  |
| 20. Buff, gritless, tiny holes ; yellow slip surface ; very dark red paint.            | B. 100. |
| 21. Black, grits ; washed on both surfaces ; bnd. ext. but encrusted.                  | B. 100. |
| 22. Black, almost gritless ; black at top getting brown lower down.                    | B. 115. |
| 23. Brown with grits ; dull black surface int. and ext.                                | B. 115. |
| 24. Black, grits and straws ; softer to surface ; black int. ; creamy yellow bnd. ext. | B. 115. |
| 25. Black ; red brown slip ; bnd. int. and ext. ; patch of dark brown.                 | B. 115. |
| 26. Yellow, gritty, with straws.   | B. 145. |
| 27. Black ; bnd. int. and ext.   | B. 145. |
| 28. Brown gritty ; black and brown int. ; black bnd. ext.                              | B. 115. |

For convenience, the depths below local datum indicated at the bottom right of the fragments in this and the following Plates have been averaged from a range rarely exceeding half a metre.





### CHAÜSHLI HÜYÜK 1937



### CHAÜSHLI HÜYÜK

1937

#### TABLE OF OBSIDIAN ARTIFACTS AND FLAKES

Classification	Surface	Trench B	Trench D	Trench E	Chert Flint	Total
Blade Sections	24	18	2	2	3	49
Gravers	5	1				6
Borers	1	2				3
Points	1					1
Scrapers	2	3				5
Cores	7			1		8
Worked Flakes	7	2			1	10
Flakes	46	15	5	1	3	70
Total worked Obsidian & Chert in each section	47	26	2	3	4	82

CHAÜSHLI HÜYÜK, 1937.

SELECTED POTSDHERDS, SKETCH PLAN AND CHART OF ARTIFACTS.





## MERSIN, 1937.

TRENCH A. -350 TO -220 CMS.

### DESCRIPTION OF FRAGMENTS ON PLATE XIII.

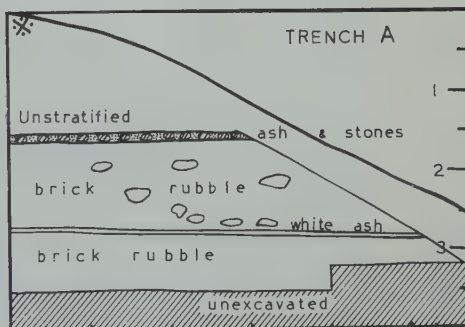
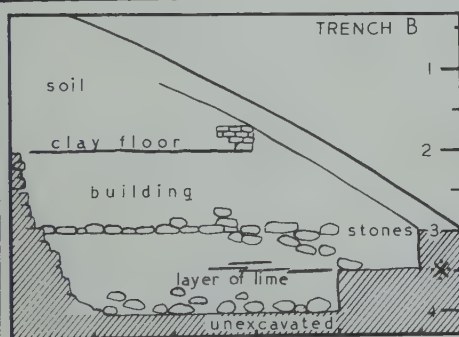
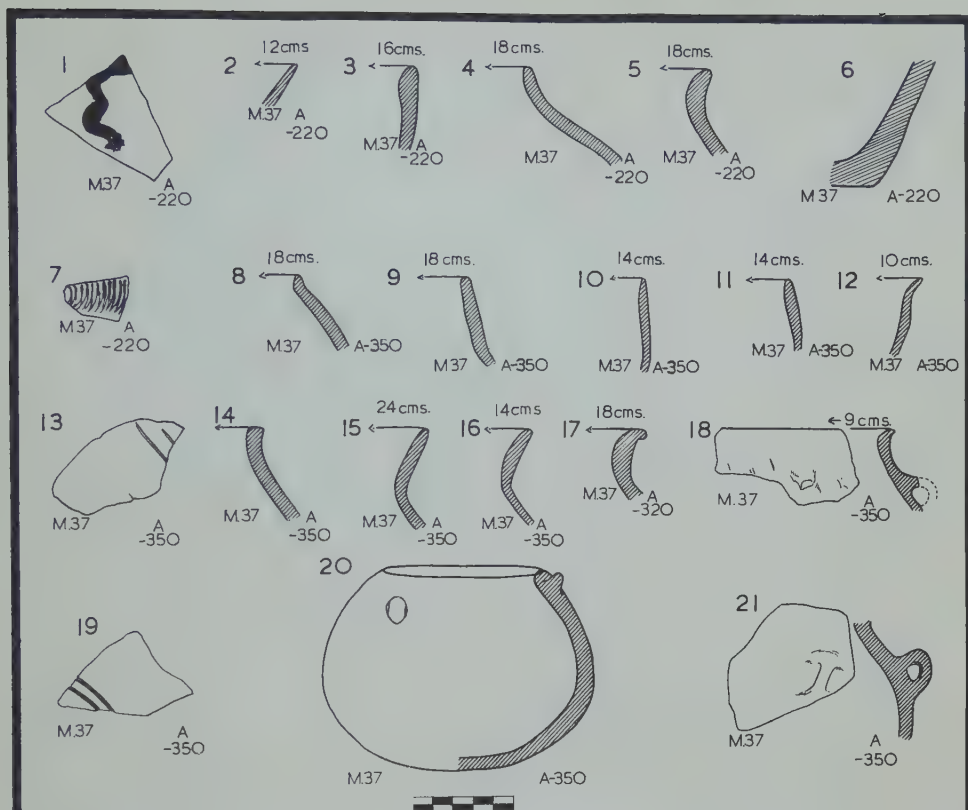
- |  |         |
|--|---------|
| 1. Grey, gritty ; sandy yellow int. and ext. ; red paint.                    | A. 220. |
| 2. Grey, gritless ; lighter on surfaces ; black slip bnd. int. and ext.      | A. 220. |
| 3. Dark brown, almost gritless ; brown black band. ; uneven.                 | A. 220. |
| 4. Brown-grey, some grits ; grey int. ; brown ext. ; red slip bnd. ; uneven. | A. 220. |
| 5. Buff gritty ; warm yellow surface ; few vert. incisions on shoulder.      | A. 220. |
| 6. Brown gritty ; baked brick red int. and ext. ; both surfaces wet-sm.      | A. 220. |
| 7. Brown ; black slip bnd. int. and ext. ; incised ext.                      | A. 220. |
| 8. Dark grey, fine white grits ; dark grey slip ext. ; hard baked.           | A. 350. |
| 9. Brown, fine grits ; dark surface int. and ext.                            | A. 350. |
| 10. Brown, small grits ; dark brown slip bnd. int. and ext. ; streaky.       | A. 350. |
| 11. Yellow grey ; yellow grey bnd. int. ; black slip bnd. ext.               | A. 350. |
| 12. Brown grey ; black slip bnd. int. and ext.                               | A. 350. |
| 13. Dark brown, gritty ; wet-sm. ; pinky int. ; black brown ext.             | A. 350. |
| 14. Brown black, very small grits ; brown slip int. and ext.                 | A. 350. |
| 15. Grey, grits ; wet-sm. ; pinky buff surface.                              | A. 350. |
| 16. Dark drab gritty ; pinky red surface.                                    | A. 350. |
| 17. Grey, gritty, baked reddish ; dull pinky drab slip int. and ext.         | A. 320. |
| 18. Dark, some grits ; irregular varying outline.                            | A. 350. |
| 19. Pink-red, baked reddish ; warm yellow surface ; rough finish.            | A. 350. |
| 20. Grey, small grits ; rough int. ; yellow brown slip bnd. ext.             | A. 350. |
| 21. Grey brown, gritty ; pinky surface ; wet-sm. ; dark red int. ; uneven.   | A. 350. |

[ The sequence reads from the bottom upwards throughout the successive plates. Thus, A-350 represents the lowest level and B-30 the highest level in trenches A and B. ]

DESCRIPTION OF STRATIGRAPHY

1. Grey, gritty; sandy yellow int. and ext.; red paint.
2. Grey, gritty; lighter on surfaces; black slip bnd. int. and ext.
3. Dark brown, almost grittyless; brown black bnd.; uneven.
4. Grey, gritty; sandy yellow int. and ext.; red paint.
5. Buff gritty; warm yellow surface; few vert. incisions on shoulder.
6. Brown gritty; baked brick red int. and ext.; both surfaces wet-sm.
7. Brown; black slip bnd. int. and ext.; incised ext.
8. Dark grey, fine white grits; dark grey slip ext.; hard baked.
9. Brown, fine grits; dark surface int. and ext.
10. Brown, small grits; dark brown slip bnd. int. and ext.; streaky.
11. Yellow grey; yellow grey bnd. int.; black slip bnd. ext.
12. Brown grey; black slip bnd. int. and ext.
13. Dark brown, gritty; wet-sm.; pinky int.; black brown ext.
14. Brown black, very small grits; brown slip int. and ext.
15. Grey, gritty; wet-sm.; pinky buff surface.
16. Dark drab gritty; pinky red surface.
17. Grey, gritty, baked reddish; dull pinky drab slip int. and ext.
18. Dark, some grits; irregular varying outline.
19. Pink-red, baked reddish; warm yellow surface; rough finish.
20. Grey, small grits; rough int.; yellow brown slip bnd. ext.
21. Grey brown, gritty; pinky surface; wet-sm.; dark red int.

The sequence reads from the bottom upwards throughout the successive plates. Thus, A-350 represents the lowest level and A-30 the highest level in trenches A and B.



# CHART OF OBSIDIAN AND CHERT ARTIFACTS AND FLAKES

MERSIN HÜYÜK January 1937	Obsidian					Chert				
	Blade Sections	Sickle Blades	Worked Flakes	Cores	Flakes	Total Worked	Sickle Blades	Worked Flakes	Flakes	Total Worked
Surface				3	10	3	1		2	1
B. 130-200					4		1			1
B. 230-320		1	1		7	2	1		1	1
A-120										
A-200	2				2	2				
A. 240-300	4				4	4				
A-350							1			1
Total	6	1	1	3	27	11	4		3	4

MERSIN, 1937, Souk Sü Hüyük.

SHERDS FROM LOWEST LEVELS AND DIAGRAMS. THE ASTERISK IN SECTION OF TRENCH B MAY BE EQUATED APPROXIMATELY WITH THAT IN SECTION OF TRENCH A.





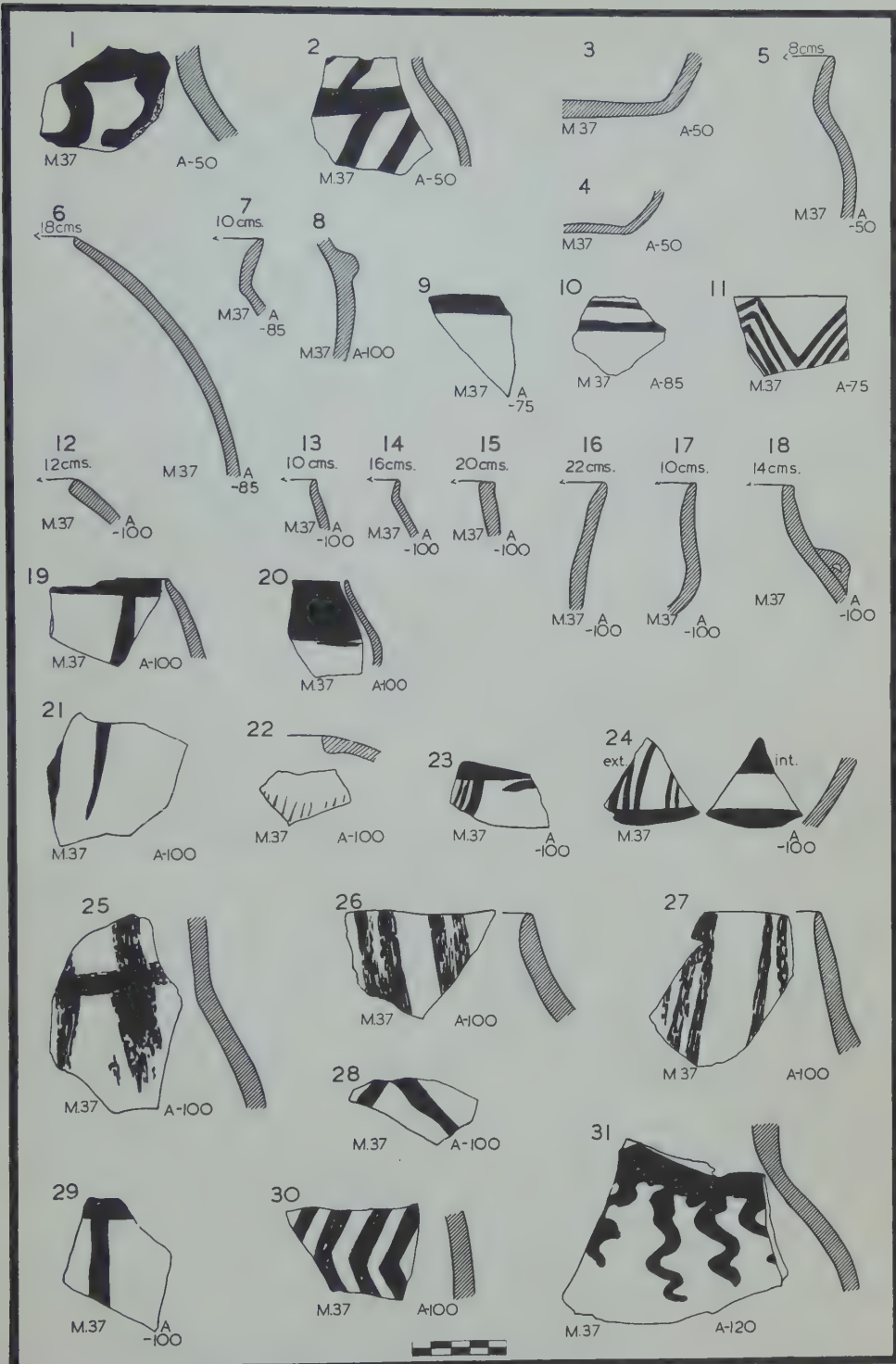
# MERSIN, 1937.

TRENCH A. -120 TO -50 CMS.

## DESCRIPTION OF FRAGMENTS ON PLATE XIV.

1. Brown, gritty irregular ; reddish int. ; yellow slip wet-sm. red painted dec. ext. A. 50.
2. Pink yellow core ; red brick int. ; lt. yellow slip ext. ; dark red bands. A. 50.
3. Grey brown gritty ; wet-sm. int. and ext. A. 50.
4. Pink buff ; wet-sm. ; wh-m. A. 50.
5. Grey, small white grits ; baked red int. ; warm brick ext. A. 50.
6. Brown gritty ; brown wet-sm. int. ; black slip bnd. ext. A. 85.
7. Brown, fine grits ; black slip int. and ext. ; now dull A. 85.
8. Brown small grits ; yellow brown int. ; yellow slip bnd. ext. ; coil made. A. 100.
9. Same as 1 ; bright red painted dec. A. 75.
10. Yellow brown gritty ; yellow slip ext. ; dec. red matt paint. A. 85.
11. Brown fine grits ; dull wet-sm. int. ; warm lt. br. slip, vert. bnd. ; dec. red matt. A. 75.
12. Brown gritty ; brown slip bnd. int. and ext. A. 100.
- 13, 14. Yellow ; black slip bnd. int. and ext. A. 100.
15. Red brick ; dark brown bnd. int. and ext. ; ? fine straw marks. A. 100.
16. Yellow brick gritty ; yellow wet-sm. int. and ext. ; coil made. A. 100.
17. Grey ; brown slip bnd. int. and ext. 3 cms. ; remainder wet-sm. yellow int. ; brown ext. A. 100.
18. Grey brown ; yellow wash int. ; yellow red slip bnd. ext. ; roughish. A. 100.
19. Buff gritty ; wet-sm. ext. ; dec. dull red paint. A. 100.
20. Pinky yellow gritty ; dark red band matt ; incised dec. A. 100.
22. Light brown gritty ; brown bnd. int. and ext. A. 100.
23. Same as 10. A. 100.
25. Brown gritty ; pinky buff surface ; painted dark red ; worn. A. 100.
26. Brown gritty ; pinky yellow slip ; dull red bands ext. A. 100.
- 27 as 26. Dull yellow-red paint, faint. A. 100.
- 28, 29 as 19. A. 100.
30. Brown med. and small grits ; brown slip int. and ext. ; black on deep red dec. A. 100.
31. Brown fine grits ; brown slip int. and ext. ; brown wet-sm. ext. ; paint dull black. A. 120.





MERSIN, 1937, SOUK SÜ HÜYÜK.  
PAINTED SHERDS ETC., FROM CUTTING A.





## MERSIN, 1937.

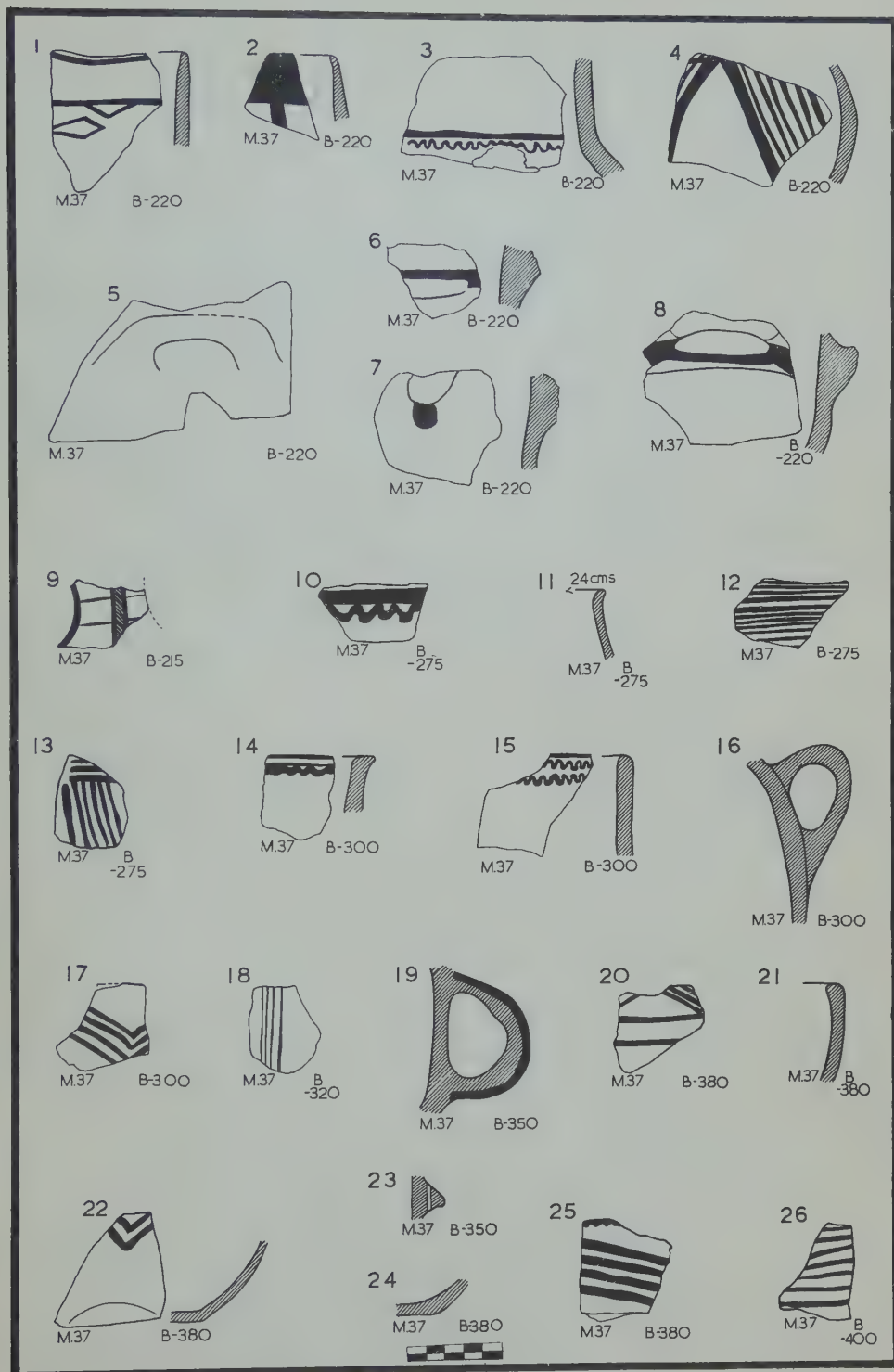
TRENCH B. -400 TO -220 CMS.

### DESCRIPTION OF FRAGMENTS ON PLATE XV.

- |  |         |
|--|---------|
| 1. Red brown, gritty ; wet-sm. int. and ext. ; black paint ext.                                      | B. 220. |
| 2. Grey-yellow, small grits ; band pink-red slip bnd. int. ; lt. red band ext. with red brown paint. | B. 220. |
| 3. Coarse, gritty ; yellow int. ; white slip bnd. black paint ext.                                   | B. 220. |
| 4. close yellow, gritty ; white slip int. and ext. ; black paint ext.                                | B. 220. |
| 5. Brown red, large white grits ; lt. brown wet-sm. int ; and ext. ; h.m.                            | B. 220. |
| 6. Dark grey, gritty ; yellow int. ; yellow white slip ext. ; black paint.                           | B. 220. |
| 7. Brown gritty ; yellow buff sm. int. ; buff slip bnd. ext. ; black paint ; h.m.                    | B. 220. |
| 8. Biscuit, grey large grits ; brownish yellow int. ; white slip bnd. ext. ; worn ; black paint.     | B. 220. |
| 9. Dark grey ; white slip bnd. brown paint with bands of red and black.                              | B. 215. |
| 10. Yellow, gritty ; yellow-sm. int. ; white slip bnd. with black paint ext.                         | B. 275. |
| 11. Grey, small grits ; bnd. int. ; black slip bnd. ext.   | B. 275. |
| 12. Yellow gritty ; yellow sm. surfaces ; red paint ext. ; h.m.                                      | B. 275. |
| 13. Pinky grey large grits ; white slip with black paint ext.  | B. 275. |
| 14. Yellow gritty ; lt. yellow int. ; buff slip bnd. ext. with black paint ; h.m.                    | B. 300. |
| 15. Pinky yellow ; yellow slip bnd. int. and ext. ; matt black paint.                                | B. 300. |
| 16. Brown gritty ; red brown int. ; brown and black bnd. ; unevenly fired.                           | B. 300. |
| 17. Pinky red ; roughly washed int. ; yellow slip bnd. ; black paint bnd. ext.                       | B. 300. |
| 18. Brown grey, gritless ; lt. yellow int. ; dark brown slip bnd. ext. red paint ; h.m.              | B. 320. |
| 19. Red brown, large grits ; brown buff slip bnd. int. and ext. ; black paint.                       | B. 350. |
| 20. Warm grey gritless ; lt. grey sm. int. ; grey slip bnd. black paint ext. ; h.m.                  | B. 350. |
| 21. Grey, white grits ; grey unsm. int. and ext. ; h.m.  | B. 350. |
| 22. Dark grey, gritless ; buff with red bnd. paint ext.  | B. 380. |
| 23. Grey, white grits ; brown bnd. int. and ext. ; h.m.  | B. 350. |
| 24. Yellow, gritless ; yellow int. ; pink sm. ext. ; h.m.  | B. 380. |
| 25. Coarse grits ; whitish yellow int. ; yellow white slip ext. ; black paint.                       | B. 380. |
| 26. Pink, gritty, thin ; pink red with red paint ext.  | B. 400. |

DESCRIPTION OF FRAGMENTS ON PLATE XV.

1. Red brown, gritty; wet-sm. int. and ext.; black paint ext.
2. Yellow, small grits; band pink-red slip bnd. int.; lt. red ext. with red brown paint.
3. Coarse, gritty; yellow int.; white slip bnd. black paint ext.
4. Close yellow, gritty; white slip int. and ext.; black paint ext.
5. White grits; lt. brown wet-sm. int.; and ext.
6. Dark grey, gritty; yellow int.; yellow white slip ext.; black
7. Brown gritty; yellow buff sm. int.; buff slip bnd. ext.; black paint; h.m.
8. Biscuit grey large grits; brownish yellow int.; white slip bnd. ext.; worn; black paint.
9. Dark grey; white slip bnd. brown paint with bands of red and black.
10. Yellow gritty; lt. yellow int.; buff slip bnd. ext. with black paint; h.m.
11. Pinky yellow; yellow slip bnd. int. and ext.; matt black paint.
12. Brown gritty; red brown int.; brown and black bnd.; unevenly fired.
13. Pinky red; roughly washed int.; yellow slip bnd.; black paint bnd. ext.
14. Brown grey, gritless; lt. yellow int.; dark brown slip bnd. ext. red paint; h.m.
15. Red brown, large grits; brown buff slip bnd. int. and ext.; black paint.
16. Grey, white grits; grey unsm. int. and ext.; h.m.
17. Dark grey, gritless; buff with red bnd. paint ext.
18. Grey, white grits; brown bnd. int. and ext.; h.m.
19. Yellow, gritless; yellow int.; pink sm. ext.; h.m.
20. Coarse grits; whitish yellow int.; yellow white slip ext. black paint.
21. Thin; pink red with red paint ext.



MERSIN, 1937, Souk Sü Hüyük.  
SHERDS FROM THE LOWEST LEVELS OF CUTTING B.





## MERSIN, 1937.

TRENCH B. -185 TO -30 CMS.

### DESCRIPTION OF FRAGMENTS ON PLATE XVI.

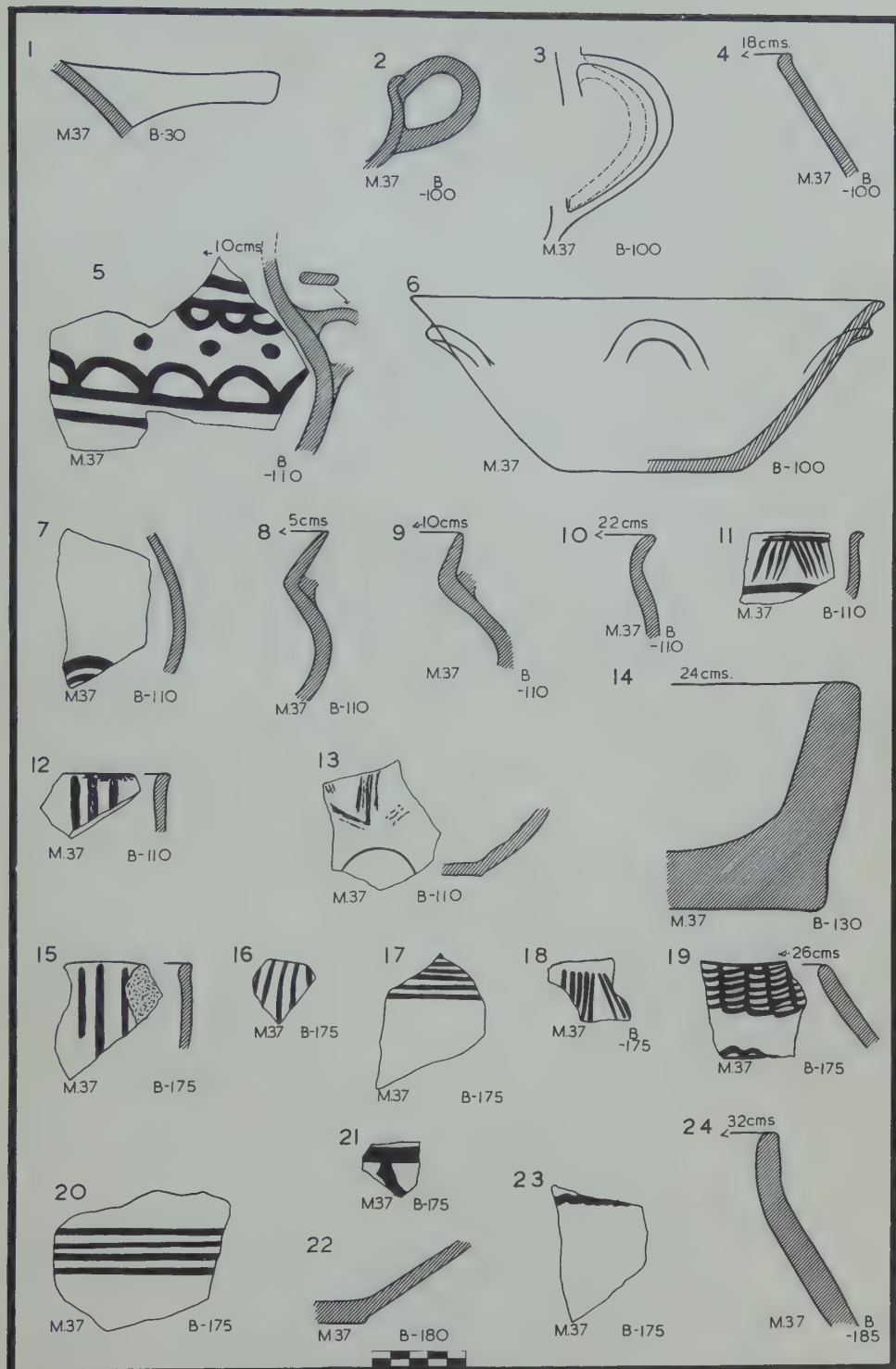
- |  |         |
|--|---------|
| 1. Dark grey, gritty ; brown fairly sm. int. and ext. ; wh.m.                                      | B. 30.  |
| 2. Yellow gritless ; yellow int. ; brown slip bnd. ext.  | B. 100. |
| 3. Yellow brown, large grits ; unsm. int. ; buff bnd. ext.   | B. 100. |
| 4. Lt. yellow, large grits ; yellow rough int. ; buff bnd. ext. ; h.m.                             | B. 100. |
| 5. Dark gritty, baked brown ; brown rough int. ; matt ext. ; very dark red.                        | B. 110. |
| 6. Warm brown grey with grits ; black bnd. int. and ext. ; 4 lunate handles.                       | B. 100. |
| 7. Brown, fine grits ; yellow slip bnd. ext. ; black painted dec.                                  | B. 110. |
| 8. Dark grey-yellow, small grits ; sandy yellow unsm. surfaces.                                    | B. 110. |
| 9. Yellow brown, fine grits ; yellow wet-sm. ; faint traces dull red paint.                        | B. 110. |
| 10. Dark red, grey grits ; red brown fairly sm. surfaces ; wh.m.                                   | B. 110. |
| 11. Buff gritty ; buff int. ; white slip bnd. ext. with black paint.                               | B. 110. |
| 12. Red small grits ; yellow wet-sm. int. ; red-sm. ext. ; black-red lines.                        | B. 110. |
| 13. Brown gritty ; red brown surfaces unsm. ; traces black paint ; ? wh.m.                         | B. 110. |
| 14. Yellow pink, almost unbaked ; large straw holes ; rough buff un-sm. ; h.m.                     | B. 130. |
| 15. Red brown large grits ; buff bnd. int. ; red bnd. ext. ; black paint.                          | B. 175. |
| 17. Dark yellow, large grits ; rough int. ; yellow-white slip bnd. with dark red paint ext. ; h.m. | B. 175. |
| 18. Yellow gritty ; grey int. ; white slip, dark red paint ext.                                    | B. 175. |
| 19. Pinky large grits ; wet-sm. int. ; lt. brown bnd. ext. ; dark brown paint.                     | B. 175. |
| 20. Reddish, gritty ; rough int. ; white yellow slip ext.  | B. 175. |
| 21. Yellow gritless ; yellow int. ; yellow-white slip ext. with black bnd. paint.                  | B. 175. |
| 22. Lt. brown large grits ; rough int. ; lt. brown hard bnd. slip ext.                             | B. 180. |
| 23. Yellow-brown, few grits ; yellow sm. int. ; white slip bnd. ext.                               | B. 175. |
| 24. Brown red, white grits ; wet-sm. int. and ext.   | B. 185. |

# MERSIN, 1935.

TRENCH B. - 185 TO - 30 CM.

## DESCRIPTION OF SPECIMENTS ON PLATE XVI

1. Dark grey, gritty; brown (body sm. int. and ext.; wh. int. and ext.)
2. Yellow, gritty; yellow int.; brown slip bnd. ext.
3. Yellow-brown, large grits; unsm. int.; buff bnd. ext.
4. Lt. yellow, large grits; yellow rough int.; buff bnd. ext.; h. m.
5. Dark gritty, baked brown; brown rough int.; matt ext.; very dark red.
6. Warm brown grey with grits; black bnd. int. and ext.; 4 lunate handles.
7. Brown, fine grits; yellow slip bnd. ext.; black painted dec.
8. Dark grey-yellow, small grits; sandy yellow unsm. surfaces.
9. Yellow-brown, fine grits; yellow wet-sm. int.; faint traces dull red paint.
10. Dark red, grey grits; red brown finely sm. surfaces; wh. m.
11. Buff gritty; buff int.; white slip bnd. ext. with black paint.
12. Red small grits; yellow wet-sm. int.; red-sm. ext.; black-red lines.
13. Brown gritty; red brown surfaces unsm.; traces black paint; ? wh. m.
14. Yellow pink, almost unbroken; large straw holes; rough buff un-sm.; h. m.
15. Red brown large grits; buff bnd. int.; red bnd. ext.; black paint.
16. Dark yellow, large grits; rough int.; yellow-white slip bnd. with dark red paint ext.; h. m.
17. Pinky large grits; wet-sm. int.; lt. brown bnd. ext.; dark brown paint.
18. Reddish, gritty; rough int.; white yellow slip ext.
19. Yellow-brown, few grits; yellow sm. int.; white slip bnd. ext.
20. Yellow-brown, few grits; yellow sm. int.; white slip bnd. ext.
21. Yellow-brown, few grits; yellow sm. int.; white slip bnd. ext.
22. Yellow-brown, few grits; yellow sm. int.; white slip bnd. ext.
23. Yellow-brown, few grits; yellow sm. int.; white slip bnd. ext.
24. Yellow-brown, few grits; yellow sm. int.; white slip bnd. ext.



MERSIN, 1937, Souk Sü Hüyük.  
POTTERY FRAGMENTS FROM THE UPPER LEVELS OF CUTTING B.





## MERSIN, 1937.

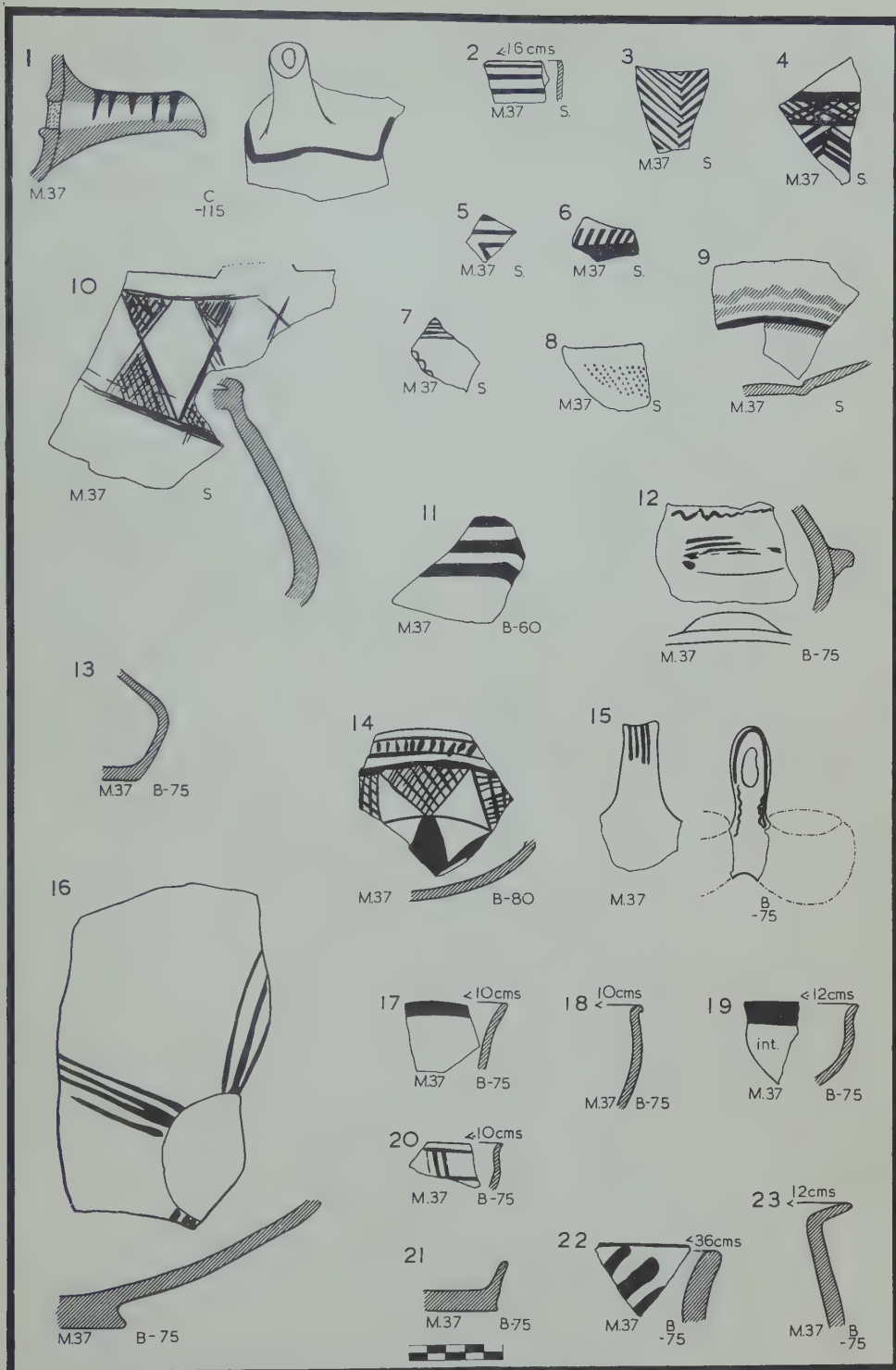
### TRENCH B. SURFACE TO -75 CMS.

#### DESCRIPTION OF FRAGMENTS ON PLATE XVII.

- |     |  |         |
|-----|--|---------|
| 1.  |  | C. 115. |
| 2.  | Brown gritless ; black painted int. ; brown with black lines ext.                                | S.      |
| 3.  | Buff, few grits ; yellow buff bnd. int. and ext. ; brown matt paint ; wh.m.                      | S.      |
| 4.  | Pinky yellow, white grits ; pink rough int. ; white slip dark brown paint ext.                   | S.      |
| 5.  | Yellow gritless ; bnd. int. and ext. ; brown lustrous paint.                                     | S.      |
| 6.  | Buff, white grits ; yellow sm. int. ; white slip bnd. with red paint ext.                        | S.      |
| 7.  | Red brown ; lt. buff int. ; grey slip bnd. ext.  | S.      |
| 8.  | Grey gritty ; grey int. ; grey bnd. ext. ; weathered, punctuations filled white.                 | S.      |
| 9.  | Buff gritless ; buff sm. int. and ext. ; one red three brown lines matt paint ; wh.m.            | S.      |
| 10. | Drab gritty ; black paint, irregularly drawn.  | S.      |
| 11. | Brown, grey grits ; buff wet-sm. int. ; white slip, red brown paint ext.                         | B. 60.  |
| 12. | Brown gritty ; yellow slip wearing off ; h.m.  | B. 75.  |
| 13. | Purple red, dark grits ; half sm. buff int. and ext. ; wh.m.                                     | B. 75.  |
| 14. | Red fine grits ; yellow-red sm. surface ; perhaps bnd. dull red paint.                           | B. 80.  |
| 15. | Pinky yellow, small grits ; surfaces same ; dark red purple paint.                               | B. 75.  |
| 16. | Grey, baked red ; small grits ; yellow slip int. and ext. ; dark red to black paint ext. ; wh.m. | B. 75.  |
| 17. | Fine pinky yellow ; yellow surface ; wet-sm. ; dull red paint.                                   | B. 75.  |
| 18. | Dark grey ; dark grey slip bnd. int. and ext. ; h.m.   | B. 75.  |
| 19. | Pinky yellow, fine grits ; red int. and on rim ; buff slip-sm. ext.                              | B. 75.  |
| 20. | Grey yellow ; slip bnd. same ; dark red paint.   | B. 75.  |
| 21. | Red brown with grits ; half-sm.  | B. 75.  |
| 22. | Brown gritty ; yellow slip dull int. and ext. ; dark red-black paint.                            | B. 75.  |

TRENCH B. SURFACE TO -75 CMs.  
DESCRIPTION OF FRAGMENTS ON PLATE XVII.

1. Brown grilles; black painted in; brown with black paint ext.
2. Buff, few grits; yellow buff bnd. int. and ext.; brown paint; white.
3. Pinky yellow, white grits; pink rough int.; white slip dark brown paint ext.
4. Yellow grilles; bnd. int. and ext.; brown lustrous paint.
5. Red brown; lt. buff int.; grey slip bnd. ext.
6. Grey gritty; grey int.; grey bnd. ext.; weathered, punctations lined white.
7. Buff grilles; buff sm. int. and ext.; one red three brown lines.
8. Dab gritty; black paint irregularly drawn.
9. Brown, grey grits; buff wet-sm. int.; white slip, red brown paint ext.
10. Brown gritty; yellow slip wearing off; h.m.
11. Purple red, dark grits; buff sm. buff int. and ext.; white.
12. Red fine grits; yellow-red sm. surface; perhaps bnd. dull red paint.
13. Pinky yellow, small grits; surfaces same; dark red purple paint.
14. Grey, baked red; small grits; yellow slip int. and ext.; dark red to black paint ext.; white.
15. Dark grey; dark grey slip bnd. int. and ext.; h.m.
16. Pinky yellow, fine grits; red int. and on rim; buff slip-sm. ext.
17. Red brown with grits; half-sm.
18. Yellow slip dull int. and ext.; dark red-black

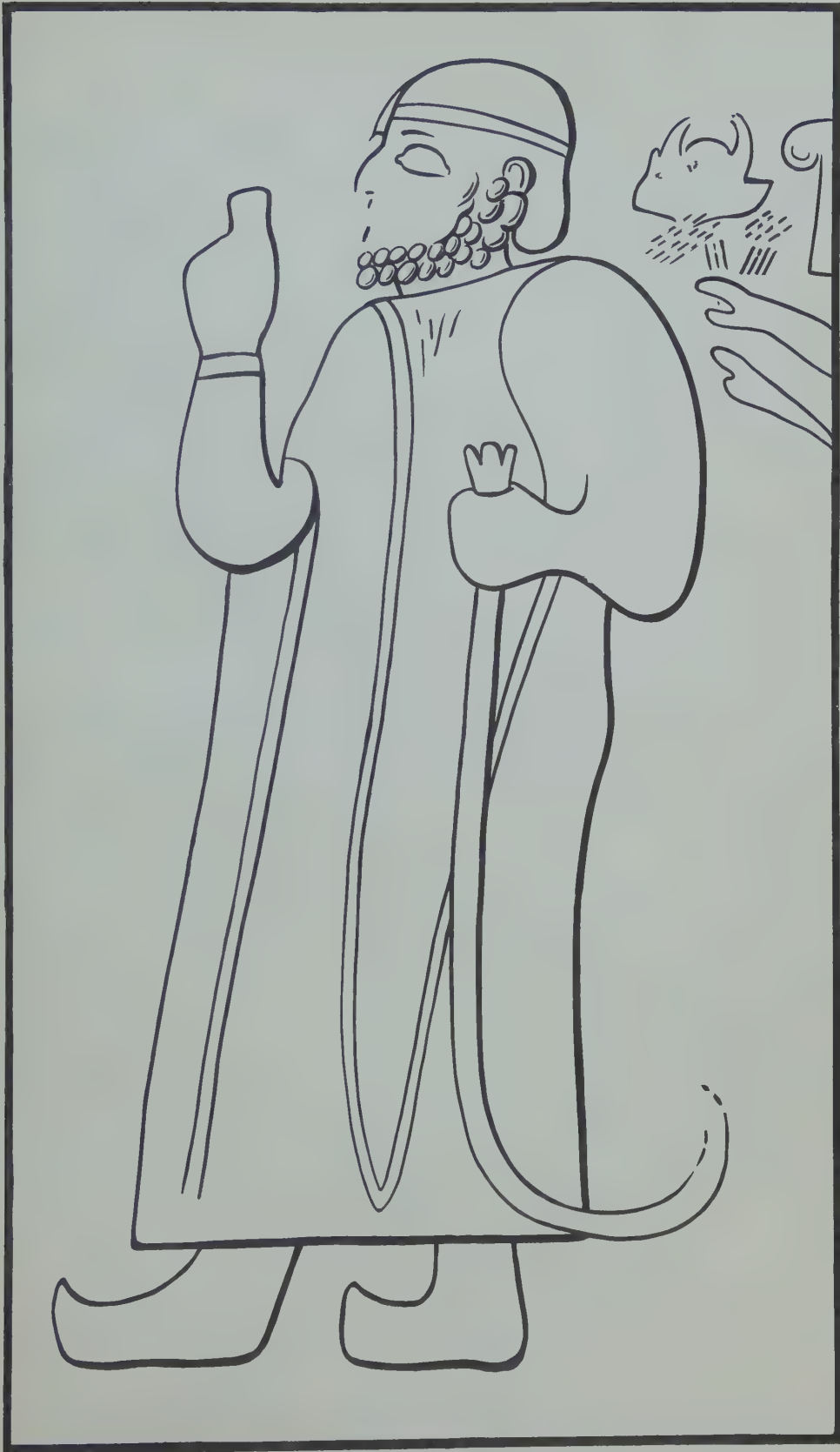


MERSIN, 1937, Souk Sû Hüyük.

POTTERY FROM THE HIGHEST LEVELS OF CUTTING B AND FROM THE SURFACE.







SIRKELI, 1936.

IMPERIAL HITTITE RELIEF ON A ROCK FACING THE PYRAMUS. HT. 173 CMS.





SIRKELI, CILICIA: IMPERIAL HITTITE RELIEF.





## STUDIES IN THE LATER HISTORY OF NUBIA

By L. P. KIRWAN, B.LITT., F.S.A.

### I

#### THE BLEMMYES OR BEJA

THE passages from the classical historians and geographers which mention the Blemmyes<sup>1</sup> leave little doubt as to the nomadic characteristics of these tribes who were scattered over the Eastern Desert between Egypt, Abyssinia, and the Red Sea. Now this is precisely the area occupied at the present day by the collection of nomad peoples grouped under the general name, Beja. In the light of such a superficial resemblance, the probable identity of the Blemmyes with the Beja has more than once been suggested by modern writers, but hitherto no very specific proof has been put forward. Yet it appears that at least as early as the sixth century A.D. the identity of the Blemmyes with a people called the Beja was recognised by travellers and scholars.

Cosmas 'Indicopleustes,' an Egyptian merchant, has left in his *Χριστιανικὴ Τοπογραφία*, composed at least as early as A.D. 535 and probably not later than A.D. 547, an account of the history, topography, and antiquities of the countries he visited in the course of his trade.<sup>2</sup> Among these was the Kingdom of Axûm. At Adûlis he discovered a white marble base or pedestal of a throne, inscribed on the back with a Greek text.<sup>3</sup> This he copied, but according to the copy of Cosmas, the first part of this inscription was in the third person while the second part was in the first person. It was not, indeed, until Henry Salt

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1. See Sethe in Pauly-Wissowa, *Real-Encyclopädie*, under Blemyes; Woolley and MacIver, *Karanog Cemetery*, Appendix I; Bréhier in *Dict. d'hist. et de géograph. ecclés.*, XLIV-L (Paris, 1935), 183-5.

2. Trans. McCrindle, Hakluyt Soc., 1897; the best edition of the Greek text is that of E. O. Winstedt, Cambridge, 1909. 547 is the probable date of the last recension made by Cosmas. See McCrindle, Introduction, xi.

3. Littmann, *Deutsche Aksum Expedition*, Bd. I, 42; Dittenberger, *Orientalis Inscriptiones*, I, 284. Littmann (*op. cit.*, 43) dates the inscription to the first half of the first century A.D.

pointed out that the two parts formed two distinct inscriptions that scholars were able to arrive at a correct interpretation of the whole.<sup>1</sup>

The first part of the text proved to be an inscription of Ptolemy III, while the remainder belonged to a native Abyssinian king whose name, contained in the first line and part of the second, Cosmas had omitted to copy. It is with the latter inscription that we are concerned, for included there among the races who lay to the north of Axûm and south of the Egyptian border and who were conquered by the Axumites, are the Beja. 'Then I overthrew the Ἀταλμὼ and the Βεγὰ and all the people who camp round them.'<sup>2</sup>

One of the features of interest of the Christian Topography of Cosmas is the explanatory annotations—either in the form of sketches, paragraphs inserted in the text, or scholia in the margins—for, as E. O. Winstedt has said, 'In most cases it is safe to credit Cosmas himself with the notes.'<sup>3</sup> In the manuscript copy of the Topography preserved in the Laurentian Library in Florence, and dating from the tenth century, these annotations have been reproduced, and the passages concerning the Beja and the corresponding notes are given below.<sup>4</sup>

Page 74. *Text.* (Winstedt.)

Line 17. . . . Ἀταλμὼ καὶ Βεγὰ.<sup>6</sup> . . .

*Scholion* (σχόλιον).

6. τοὺς Βλέμμυας οὕτως γὰρ καλοῦσιν οἱ Αἰθίοπες.

Page 75.

Line 18. . . . ἀπὸ τε Λεύκης κόμης.<sup>5</sup> . . .

*Paragraph* (παραγραφή).

5. Εἰς τὰ μέρη τῶν Βλεμμύων ἔστιν κόμη καλουμένη τὸ Λευκόγην.

The first passage requires no comment, for it is clear that the writer, almost certainly Cosmas, was well aware of the identity of the Blemmyes with the Beja. Elsewhere Cosmas shows that the Blemmyes were not unknown to him, for, speaking of the great worth set on the emerald by the Indians, he says, 'The Ethiopians who procure this stone from the Blemmyes in Ethiopia take it into India and, with the price it fetches, they invest in wares of great value.'<sup>5</sup>

In the second note, Cosmas appears to have erroneously taken the

1. Salt, *A Voyage to Abyssinia*, 1814, 412. Cosmas says (McCrindle, 59), 'The inscription again on the chair was a continuation of the other.'

2. Ed. Winstedt, 74. For the form Βουγαιεται, see Littmann, *op. cit.*, IV, 4.

3. See Winstedt, Introduction, 29. McCrindle also takes this view: 64, note 2.

4. Winstedt's Greek text based on the Laurentian MSS. The page and line references are to this edition.

5. *Topography*, trans. McCrindle, 371. Olympiodorus likewise affirms that the emerald mines—almost certainly those near Berenike—were then (c. A.D. 427) in the

village of Leuke to be Leucôge which, according to Strabo and the author of the *Periplus of the Erythraean Sea*, seems to have been across the Red Sea in Arabia.<sup>1</sup> It has, in fact, been identified with the port of Hauâra.<sup>2</sup>

Nevertheless, the suggestion that the Blemmyes were then in the neighbourhood of the Red Sea is of interest, for it has been recorded that, in A.D. 378, the Blemmyes captured a ship from Aila and sailed down the Red Sea in their prize to attack the Monastery of Raïthe (Tor) on Mount Sinai.<sup>3</sup> Moreover, the Syriac writer, John of Ephesus, a contemporary of Cosmas, relates that, in his day, the kingdom of the Blemmyes stretched over the Eastern Desert from the Nile to the Red Sea.<sup>4</sup>

The various tribes of the Beja were well known to the Christian biographers in Arab times for, as allies of the Christian Nubians, they came in frequent contact with the forces of Islam.<sup>5</sup> That they, too, were aware of this identity of the Beja with the Blemmyes is shown by two corresponding passages in the Coptic and Arabic lives of the famous archimandrite Shenute. The Coptic text is described by M. Amélineau as an abridged version of the *Life of Shenute* by his disciple Bêsa, and he conjectures that the date of the text probably lies towards the end of the sixth century.<sup>6</sup> The Arabic text M. Amélineau attributes to a time probably not later than the thirteenth century on the grounds that the Arabic version is a direct translation from the Coptic, more often than not a word for word translation, and that therefore it was probably made before the knowledge of Coptic as a written language had died out in Egypt.<sup>7</sup> The passages in question tell of a meeting between the Blemmyes and Shenute near Psoï (El-Manshâh, in Upper Egypt).

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hands of the Blemmyes. Cf. ap. Photius, *Pat. Gr.*, CIII, col. 273. See, too, Epiphanius, *De Gemmis*, ed. Blake-De Vis, 247. London, 1934.

1. See references in Dittenberger, *Orientalis Inscriptiones*, I, 294.

2. McCrindle, *Topography*, 64.

3. *Illustrium Christi martyrum lecti triumphi*, ed. Combessis, 107-9; Quatremère, *Mém. géogr. et histor.*, II, 130-3. Paris, 1811.

4. *Ecclesiastical History*, trans. Payne Smith, 1860, 325.

5. MacMichael, *History of the Arabs in the Sudan*, I, 164 ff.

6. *Monuments pour servir à l'histoire de l'Égypte chrétienne*, IV, xiv.

7. Amélineau, *op. cit.*, li, lii. Coptic survived as a spoken tongue in Egypt until the sixteenth century. M. Ladeuze points out with regard to the Arabic recensions of the *Life of St. Pachomius* that, as early as the tenth century, Coptic as a written language was no longer in general use except among men of letters. See *Étude sur le cénobitisme pachomien*, 78. A remarkable instance of Coptic still spoken in Upper Egypt has recently been reported by Vycichl. Cf. *American Jour. of Archaeology*, 40 (Second Series, 1936), 551.



*Coptic Version* (trans. Amélineau, p. 49) :

‘ Il arriva aussi en un temps que les Blemmyes (Balnemôwi) étant allés au Nord pour prendre des villes et pour faire prisonniers les hommes avec leurs bestiaux, ils allèrent au Sud avec tout leur butin et ils s’arrêtèrent dans le nome de Psoï. Alors mon père apa Schenoudi voulut aller vers eux à cause des prisonniers qu’ils avaient faits, et lorsqu’il eut traversé le fleuve pour aller à l’Orient vers eux, ceux qu’il rencontra d’abord levèrent leurs lances voulant le tuer : à l’instant leurs mains sechèrent et devinrent arides comme bois, elles restèrent étendues sans se plier, et ils s’écrièrent dans un grande nécessité. De même au reste des gens il arriva de la sorte jusqu’à ce qu’il parvint au lieu où était leur roi.’

*Arabic Version* (trans. Amélineau, p. 396) :

‘ Une autre fois les Bega (البجة) attaquèrent le côté du nord, pillèrent la ville d’Abshai (Psoï, El-Manshâh), violèrent les habitants, allèrent du côté du Sahid et redescendèrent dans le pays d’Abshai. Et voici que mon père alla vers eux à cause des prisonniers qu’ils avaient faits ; lorsqu’il s’approcha d’eux, les premiers d’entre eux se jetèrent sur mon père et ceux qui l’accompagnaient afin de les percer (de leur lances), mais leurs mains se dessechèrent comme du bois, et ils ne pouvaient les remuer : et les autres furent atteints de même jusqu’à ce que mon père arrivât à leur chef.’

M. Amélineau, moreover, suggests that the date of the original Coptic text from which the Arabic translation was made is, on internal evidence, probably towards the end of the seventh century and that this and the abridged Life of the Abbot cited above may in turn be traced to an original Life by Bêsa.<sup>1</sup> However, as far as the Blemmyes and the Beja are concerned, the passage is of considerable interest, as it confirms the scolion of Cosmas.

To make this identification the more certain, it is only necessary to compare what we know of the Blemmyes with the accounts of the history and characteristics of the Beja, such as may be found in the works of the Arab geographers.

Maḳrîzî, following Ibn Selîm of Aswân<sup>2</sup> and Mas’ûdi,<sup>3</sup> includes several tribes under the general name of Beja : the Hadareb (the Hadendoa), who occupied the country adjoining Egypt as far as the

1. Amélineau, *op. cit.*, lvii.

2. Maḳrîzî, *Khîṭat*, ed. Wiet, III, 267 ; trans. Bouriant, I, 561 ff.

3. Mas’ûdi, *Prairies d’or*, trans. Meynard and Courteille, III, 31-43. Also quoted in Maḳrîzî. Ibn Selîm and Mas’ûdi were writing in the tenth century.

Wadi 'Alâqi and towards the Red Sea; the Zenafeg, more numerous than the Hadareb yet subservient to the latter; and the Beja of the interior, who inhabited the deserts east of 'Alwah (the region of Khartoum), as far as the frontiers of Abyssinia and the Red Sea.<sup>1</sup> El Mas'ûdi mentions another tribe of Beja, the Khasahs, who lived in the neighbourhood of Suâkin. According to Maḳrîzî:

'The country of the Beja commences at the village of El Hazabah, near the desert of Qous (Qûs; about twenty miles north of Luxor), where the emerald mines are to be found. From El Hazabah to Qous is a distance of three stages. Towards the south, the country of the Beja borders on Abyssinia. The Beja occupy the interior of this island, namely the island of Egypt, a territory which extends as far as the sea and the islands of Suâkin, Bâda, and Dâhlak.'<sup>2</sup>

This was roughly the area occupied by the Blemmyes in Roman times. One point deserves special notice, and that is the mention of the emerald mines in the country of the Beja, for, during the fifth and sixth centuries A.D., as we are told by Epiphanius, Olympiodorus, and Cosmas Indicopleustes, the emerald mines of the Eastern Desert were the special property of the Blemmye kings.<sup>3</sup>

One especially illuminating passage in Ibn Selîm's account of the Beja deserves to be quoted in full:

'The Beja are turbulent and a wicked people. At the time of Islam and even before that they were wont to plunder Upper Egypt along the right bank of the Nile, destroying innumerable towns. The Pharaohs made many expeditions against them and signed treaties with them. The Greeks (Romans) did the same when they were the rulers of Egypt, for they wanted their mines.'<sup>4</sup>

This is strangely reminiscent of the depredations of the Blemmyes in the Thebaid during the fourth and fifth centuries and the treaties of Diocletian, Maximinus, and Florus.<sup>5</sup>

The nomadic characteristics of the Blemmyes have already been sufficiently emphasised and, in view of their identity with the Beja, the remarks of Maḳrîzî as to the nomad traits of the latter are of some interest. They are, he says, 'a nomadic people who travel about with

1. Bouriant, *loc. cit.*

2. Bouriant, 561; taken from Ibn Selîm; see Wiet, *Khitat*, III, 267, note 2.

3. Olympiodorus, ed. Niebuhr, 466; *Topography*, trans. McCrindle, 371; Epiphanius, *De XII Gemmis*, ed. Blake-De Vis, 247.

4. Maḳrîzî, trans. Bouriant, 564.

5. See Milne, *Egypt under Roman rule*, 100. London, 1924.

their tents of skin to wherever there is pasturage.’<sup>1</sup> And, again, ‘the Beja live on the flesh of their sheep, goats, and cows, and drink milk.’<sup>2</sup> The picture will be familiar to those who have seen the Hadendoa and the ‘Abâbda driving their flocks before them through the narrow defiles of the Red Sea hills in search of fresh grazing ground. A note here as to the descendants of the ancient Blemmye-Beja may not be out of place. To-day the Beja are composed of the ‘Abâbda, the Bishârîn, the Hadendoa, and the Beni ‘Âmir.<sup>3</sup> According to Professor Seligman, the latter are the true descendants of the ancient Beja people. ‘The Bishârîn,’ he says, ‘have been most modified by the foreign round-headed element, while the Beni ‘Âmir are the least influenced, so that, broadly speaking, their physical characteristics may be taken to be those of the original Beja inhabitants of the Eastern Desert.’<sup>4</sup> On the other hand, it may be objected that non-Beja traditions as preserved in the native ‘nisbas’ are united in attributing to the Beni ‘Âmir<sup>5</sup> an Arab descent denied to the Bishârîn and the Hadendoa; the name, Beni ‘Âmir, too, is a purely Arab one.<sup>6</sup>

At the present day, the Beni ‘Âmir live mostly on the confines of Abyssinia and speak the Semitic Tigre, while the Bishârîn, living further north, still speak To-Bedawi. The ‘Abâbda, closely related to the Beja, live between Aswân, Kena, and the Red Sea, while another branch lives to the east of Berber.

This wide distribution of the Blemmyes or the Beja in ancient as in modern times, as well as their nomadic habits and their numerous tribal divisions, goes far to explain the apparent inconsistencies in the accounts of the classical historians and the Arab geographers.

But although the Blemmyes were known as the Beja in Islamic times, it may be that a section of this race retained some memory of their ancient name. It is curious that two Arab writers—Idrîsî in the twelfth and Ibn Wardî in the fourteenth century—refer to a people variously called El-Beliyûn, Beliyer, and El-Beliyîn, who were said to

1. Bouriant, *op. cit.*, 561.

2. Bouriant, *loc. cit.*

3. MacMichael, *History of the Arabs*, I, 35.

4. Seligman, ‘Some Aspects of the Hamitic Problem in the Anglo-Egyptian Sudan,’ in *Jour. Royal Anthropol. Instit.*, XLIII, 603-4.

5. For the close anthropometrical resemblance of the ‘Abâbda to the Beni ‘Âmir, see G. W. Murray, ‘Northern Beja,’ in *J.R.A.I.*, LVII (1927), 39 ff.

6. MacMichael, *History*, I, 36. The name Begâyt is used to-day by the peoples of Tigre to denote a particularly swift-running breed of cattle, which originated in the Beni ‘Âmir country. Cf. *Princeton Expedition to Abyssinia*, II, 212, note 10; 220, note 11.

inhabit the Eastern Desert between the Nubians, the Abyssinians, and the Beja,<sup>1</sup> and to have been Jacobite Christians.

At an even later date, early in the sixteenth century, Father Alvarez, a Portuguese who went on a diplomatic mission to Abyssinia, claims to have encountered a people called Bellonos.

'At the end of the Kingdom of Bagamidri there are Moors called Bellonos who are tributaries of Prester John for a number of horses. Towards the north, these Bellonos border on a people who are called Nubiis.'<sup>2</sup>

A possible derivative from the ancient forms of the name Blemmyes (Demotic-*Blhn*, *Blh.w*; Coptic-*Belehmu*, *Balehmu*) is not unlikely.

Professor Seligman has recorded<sup>3</sup> that there is to-day among the Beni 'Âmir a tradition that the original rulers of their land were the Bello, a people described as *ناس قدام*, the people of former times. As late as the seventeenth and eighteenth centuries, travellers record the existence of a kingdom of the Balou or Ballow in the neighbourhood of Suâkin.<sup>4</sup> In the fourteenth century, some at least of the Bello were Christians, while there is to-day a tradition of a Christian King of the Bello.<sup>5</sup> Now there are at the present time many practices among the Beja which leave little doubt as the former existence of Christianity among them.<sup>6</sup> At the same time it can be shown on the evidence of a contemporary papyrus—and this is a subject which will be treated more fully below—that the Blemmyes, the forerunners of the Beja, were converted to Christianity in the first half of the sixth century A.D. The problem of the names Blemmyes and Beja is further complicated by the occurrence in demotic and earlier Egyptian texts of the term Meja (*Md̄*) as applied to a Nubian people who were largely recruited in ancient Egypt for service in the police and the army. Griffith has suggested<sup>7</sup> that these Meja are in fact the Beja, but though the identification is possible on philological grounds, there seems as yet no further evidence in support of it. But there are definite references

1. Stern, in *A.Z.*, XIX, 74.

2. *Narrative of a Portuguese Embassy to Abyssinia* (1520-27), Hakluyt Society, 351, 352.

3. 'Note on the History and the Present Condition of the Beni 'Âmir' (Southern Beja)' in *Sudan Notes and Records*, XIII, 83 ff.

4. Seligman, *op. cit.*, 88.

5. Fleming in *Sudan Notes and Records*, II, 74-76.

6. See G. W. Murray, *Sons of Ishmael*, 199. London, 1935.

7. Griffith, *Catalogue of the Rylands Papyri*, III, 87, note 4; 420.



to the Blemmyes in demotic documents<sup>1</sup> under such forms as *Blhn*, *Blh.w*. It may be, however, that both terms were in use in Ptolemaic times to designate the nomad tribes of the Eastern Desert, the Greek and Coptic<sup>1</sup> forms being closely allied.<sup>2</sup>

## II

### BLEMMYES AND NUBIANS IN THE FIFTH CENTURY

The decree of Theodosius I, designed to exterminate paganism throughout the Roman world,<sup>3</sup> though vigorously enforced in Alexandria and Lower Egypt, had little effect in the Thebaid. The Emperor's boast, 'Paganos qui supersunt quamquam jam nullos esse credamus,' had little basis in fact.<sup>4</sup> The majority of the people of Upper Egypt were still pagan, and the administrators, no more than lukewarm Christians, had neither the power nor, probably, the inclination to secure the observance of the decree. It is possible that they had a secret sympathy with the barbarian tribes who so valiantly upheld the old religion. Politically, at any rate, the latter had its uses. In 394, a shrine in honour of the Blemmye god, Mandûlis, 'kindly of face,' was erected within the precincts of the Temple at Philae; a tactful attempt to pacify the warlike southern tribes.<sup>5</sup> But this tribute to their patron deity seems only to have acted as a spur to their audacity.

Palladius, exiled to the Thebaid between 406 and 412,<sup>6</sup> found the monastery at Tabenna crowded with fugitives from the Blemmyes, who were then pillaging the countryside.<sup>7</sup>

By the year 421 the Blemmyes, no longer content with desultory raids, completed their conquest of the Dodekaschoenus and a large part of Meroitic Nubia, where they established themselves in several

1. Griffith, *op. cit.*, 420; Spiegelberg, *Die demotischen papyri Hauswaldt*, No. 15; Griffith, 'Dodgson Papyrus,' in *P.S.B.A.*, XXXI, 105, 291. See also Griffith, *Cat. of the Demotic Graffiti of the Dodekaschoenus*, 105. Oxford, 1937.

2. Balehmu, Belehmu, Belhmowe, etc.

3. *Codex Theodos.*, XVI, i, 2; ed. Mommsen, Berlin, 1905.

4. Revillout, *Mémoire sur les Blemmyes*, 417.

5. Griffith, *Demotic Graffiti of the Dodekaschoenus*, 412. Lyons, *Report on the Temples at Philae*, 26.

6. In a dialogue on the 'Life of St. John Chrysostom'—attributed to Palladius—it is said that he was banished to Syene, 'in the neighbourhood of the Blemmyes or Ethiopians.' See Revillout, *op. cit.*, p. 392. Butler, in his introduction to *Lausiac History*, places Palladius' exile between 406-412 (I, cii).

7. *Lausiac History*, ed. Butler, II, 95; Palladius asks why so many pigs are being bred by the monks and is told that food is scarce and the monastery crowded because the Blemmyes are in the neighbourhood: τὸ γὰρ ἔθνος τῶν Βλεμμύων αὐτοῖς παροικεῖ.

of the captured towns. Talmis they made their capital; a city traditionally associated with their god Mandûlis. At Ibrîm (Primis), the mountain fortress captured by Petronius from the Ethiopians, they set their southern frontier. They could hardly have chosen a place more suited for the purpose. Its precipitous and rugged flanks make it almost impregnable, while, from the summit, a distant view can be obtained of both the desert and the river to the south. The facts as to this settlement of the Blemmyes in the Lower Nubian valley we owe mainly to the Egyptian historian Olympiodorus,<sup>1</sup> about whom a word must be said.

Olympiodorus, a native of Thebes, lived in the fifth century and wrote a work in twenty-two books, entitled 'Ιστορικοί λόγοι, which comprised a history of the Western Empire under the reign of Honorius, from 407 to October A.D. 425. The original work, however, is lost, but an abridgement has been preserved by Photius. Olympiodorus seems to have had some success as a statesman. He was sent as ambassador on several important missions amongst barbarian people and was invited by the Emperor Honorius to visit Hungary on a mission to the Huns.<sup>2</sup> Photius does not rate Olympiodorus very highly as a historian, though his criticism seems directed rather against the loose and somewhat popular style in which the work was written than against the accuracy of the statements contained in it.<sup>3</sup> Olympiodorus seems to have been a man of many parts—historian, ambassador, and alchemist<sup>4</sup>—and his work is symbolic of the growth of a nationalist spirit in Egypt, of which a significant feature was the revival of interest in the history and antiquities of the country.<sup>5</sup>

About A.D. 421 Olympiodorus was in Thebes and Syene collecting materials for a historical work (ὑλὴ συγγραφῆς) when he encountered some of the 'phylarchs and prophets of the Blemmyes'—barbarians, he says, from the city of Talmis—who engaged him in conversation, inviting him to visit their country.

1. Olympiodorus, ed. Niebuhr, Bonn, 1829, 465-466; ap. Photius (Bibl. 80) in *Patr. Graeca*, CIII, col. 273.

2. Smith, *Dictionary of Greek and Roman Biography*, III, s.v. 'Olympiodorus.' The details are derived from Photius, ed. Bekker, Codex 214 ff., p. 171.

3. Photius admits (*loc. cit.*) that Olympiodorus does not call his work a history but a collection of materials for a history.

4. Photius makes this statement on the authority of the author.

5. Cf. Asclepiades, (περὶ Αἰγυπτίων ὀγνυγίων; Horapollon, πάτρια Ἀλεξανδρείας; Hermias, πάτρια Ἐρμουνόλεως; ap. Photius, Bibl., no. 280 (*Patr. Gr.*, CIV, 324). For references to Egyptian historians of the fifth century and this aspect of the national revival, see J. Maspero, 'Horapollon et la fin du paganisme,' in *Bulletin de l'Institut français*, XI, 183 ff.

‘They took me, he says, as far as Talmis itself, so that I could investigate those regions also which extend for five days’ journey from Philae as far as the city called Prima (Ibrîm) . . . a city, furthermore, which has for long been inhabited by the barbarians, together with four other towns; Phoinikon, Chiris, Thapis and Talmis . . . I (also) saw the emerald mines, but this had not been possible except by command of the King.’

A somewhat similar account of the Blemmye occupation of Talmis and of their possession of the emerald mines is given by St. Epiphanius in his *De XII Gemmis*, composed about the end of the fourth century A.D.

‘Berenice autem contigua est Elephantinae et Talmis, cui nunc dominantur Blemmyae (Beleh̄mowe). Corruerunt autem metalla huius montis. Sunt et alia metalla in illa eadem regione barbarica Blemmyarum, qui montes sunt prope Talmem. Ex istis smaragdum effodiunt Aethiopes.’<sup>1</sup>

The reference to the emerald mines is of considerable interest. The mines of emerald known in antiquity—those mentioned, for example, by Strabo and Pliny<sup>2</sup>—lie among the Red Sea hills, in the same latitude as Aswân and slightly to the north of the port of Berenike.

The sixth-century writer, Cosmas Indicopleustes, corroborates these statements as to the Blemmyes and the emerald mines. ‘The Ethiopians,’ he says, ‘who procure this stone from the Blemmyes in Ethiopia, take it into India.’<sup>3</sup> In the tenth century, too, the mines were the property of the Eastern Desert tribes and, according to Selîm el Aswâni, were to be found in the country of the Beja.<sup>4</sup>

Sources for the history of Lower Nubia during the first half of the fifth century are exceedingly scarce. In Coptic literature, however, one text exists which allows us to catch a glimpse of the life and people of Lower Nubia at this time.<sup>5</sup> This document is in the form of a narrative of visits paid by Paphnutius, the legendary biographer of various ascetics, to the monks of the Cataract region. The period referred

1. Epiphanius, *De XII Gemmis*, ed. Blake (1934), 247; the Coptic (Sahidic) fragments ed. De Vis. Olympiodorus, *loc. cit.*

2. Lucas, *Ancient Egyptian Materials*, 160, 163. The ‘Smaragdus’ of the classical writers is more properly the beryl, a variety of emerald. The latter was not known in Egypt.

3. *Topography*, trans. McCrindle, 371. Hakluyt Soc., 1897.

4. Apud Makrîzî, *Khitat*, ed. Bouriant, 563. Cf. also El Mas’ûdi, *Les Prairies d’Or*, III, 43-50. Text and translation by Barbier de Meynard et Pavet de Courteille, Paris, 1861-77.

5. ‘Histories of the monks in the Egyptian deserts’ in Budge, *Miscellaneous Coptic Texts in the dialect of Upper Egypt*, 948 ff.



to, from various allusions in the text,<sup>1</sup> seems to be the first half of the fifth century. The interest of the document lies in the fact that throughout the narrative the people who seem to be inhabiting Lower Nubia, in the region of the First Cataract, are, not the Blemmyes but the Anouba.

‘Mark said, “There is a race to the east of us and in the south-west of our city. It is called Anouba and it is in great straits.”’<sup>2</sup>

The Blemmyes, on the other hand, appear in their customary guise as raiders from the desert.

‘And it came to pass one night when both of us were sleeping in our place of abode that the demons made a raid in the valley and they uttered cries in the language of the Blemmyes.<sup>3</sup> And when I heard them I was terrified, and I nudged my father, saying, “The Blemmyes have come upon us.”’<sup>4</sup>

It is curious that there is no mention here of the Blemmyes as inhabitants of the Nubian valley in the light of the accounts of Olympiodorus and Epiphanius. The Blemmye kingdom in Lower Nubia was of short duration, and it is doubtful whether they ever settled down as a pastoral or cattle-rearing community like the Nubians. Throughout the middle years of the fifth century they were, for the most part, plundering the towns and villages of the Thebaid; by the end of the century they had, in turn, been driven from Lower Nubia. The shortness and temporary character of their occupation—like their periodical settlements in the Thebaid, lasting for two or three years—may explain the scarcity of material remains in Nubia which can be assigned to the Blemmyes.<sup>5</sup> Their dead, no doubt, they buried in the desert under

1. The document seems to be based on an early catalogue of the bishops of Philae. The name of one bishop, Mark (Budge, *op. cit.*, 973), coincides with that of an occupant of the See under Athanasius (344-390). The text also mentions a Bishop Pseleusios, consecrated by the Patriarch Timothy (396-402); cf. Monneret, *Aswân*, 142.

2. Budge, *op. cit.*, 459 (fol. 26b).

3. Cf. Budge, *op. cit.*, 990, note 1.

4. Cf. Budge, *op. cit.*, 475 (fol. 41a). The translation by Budge (*op. cit.*, 990) is not an entirely faithful rendering of the text.

5. The curious rude stone huts at Dibğer and Kalâbsha (Talmis), recorded by Monneret de Villard, may have formed part of the Blemmye settlements. Cf. *La Nubia Medioevale*, I, 31, 59 (Cairo, 1935). One of the grave types recorded by Firth at Kalâbsha—‘a small circular grave walled with stone and surmounted by a circular cairn’—may be of the Blemmye Cemetery there, and it resembles closely the graves of the Beja of the Eastern Desert explored by Schweinfurth. See Firth, *Report on Archaeological Survey of Nubia*, 1908-9, 37; Schweinfurth, ‘Die Gräber der Uraethiopen’ (Blemmyes-Bega) in *Auf unbetretenen Wegen in Aegypten*, 267 ff. For Blemmye graves in Egypt, see Junker, *Ermenne*, 83.



heaps of stones; a custom, Strabo asserts,<sup>1</sup> common among another desert tribe, the Megabari, who were frequently confused with the Blemmyes in ancient times. A people such as Pomponius Melae describes, 'sine tectis passim ac sedibus vagi habent potius terras quam habitent,'<sup>2</sup> would not quickly have adapted themselves to the civilised surroundings of an urban life.

According to the historian Evagrius,<sup>3</sup> the ravages of the Blemmyes at this time extended as far as the Great Oasis (Khârga) where, he affirms, they put to flight the Roman garrison and captured the heresiarch Nestorius, exiled there between A.D. 435 and 436.<sup>4</sup> If there is any truth in the story, it is the only record of the activities of the Blemmyes in the deserts west of the Nile. But in a letter (quoted by Evagrius), addressed by Nestorius to the Governor of the Thebaid, the former speaks only of his capture by 'barbarians,'<sup>5</sup> who set him free at length, advising him to fly instantly from the town since 'the Mazices were on the point of succeeding them in their occupation of it.' Of the Blemmyes, however, he says nothing and the name seems to have been inserted by Evagrius. John Rufus, who also describes the invasion of the Oasis by the Mazices,<sup>6</sup> does not mention the Blemmyes; it seems more probable that Nestorius was taken prisoner by some Libyan tribe and not by the Blemmyes, whose home lay rather in the Eastern than the Western Desert.<sup>7</sup>

Towards the middle of the fifth century the Blemmyes, due perhaps to their unceasing raids on Upper Egypt, once again came in contact with the Roman forces. An epic poem, in Homeric style, tells of their defeat at the hands of a Roman general, Germanus, who attacked their camp and drove them back into their own country.<sup>8</sup> Although the author includes such heroic names as Περσίνοος and Φάληρος in his work, the name of the general, Germanus, is clearly not legendary; it seems probable, then, that the poem refers to an actual battle and to a victory not long past. In 441 a general of the name of Germanus is found in

1. Strabo, *Geography*, XVI, iv, 17.

2. Pomponius Melae, I, 4; ed. Gronovius, 33.

3. *Ecclesiastical History*, I, 7.

4. Monneret de Villard, *Les couvents près de Sohag*, I, 21.

5. Evagrius, *loc. cit.* Nestorius writes, 'Inasmuch as the beforementioned place has fallen into the hands of barbarians.'

6. Plerophories, in *Patr. Orient.*, VIII, 82. Cf. Monneret, *loc. cit.*

7. Perhaps the Nubians; cf. Leipoldt in *A.Z.*, XI, 126.

8. Berliner Klassiker Texte, V, 109; facsimile in Wilcken, *Tafeln zur alt-griech. Palaeograph.*, V.

command of the armies of Theodosius against the Vandals.<sup>1</sup> The poem has been dated on palaeographical grounds to the second half of the fifth century.<sup>2</sup> It is not improbable, therefore, that this is the same Germanus whose triumph over the neo-Trojan foe is celebrated in the Homeric manner.

At this time, however, the Romans had to contend not only with the Blemmyes but also with another barbarian tribe. A papyrus, datable to the latter half of the reign of Theodosius II (c. 425–450), contains an appeal from Appion, Bishop of Syene and Elephantine, to the Emperor in which the former pleads that the military commander of the frontier may be instructed to place troops at his disposal for the protection of his churches on the island of Philae against the combined attacks of the Blemmyes and the 'Avvouβάδες.<sup>3</sup> This document is of twofold importance for the history of Lower Nubia. In the first place, it proves conclusively that churches existed on the island of Philae at a very early date, though pagan worship continued until the great temple of Isis was finally closed by order of the Emperor Justinian.<sup>4</sup> Secondly, the papyrus contains the earliest *contemporary* reference to a people called the 'Avvouβάδες, who were later to rule over the Nubian valley between the First and the Third Cataracts and to found there the first Christian Nubian kingdom.<sup>5</sup> Encouraged by their successful attack on the frontier, the Blemmyes pushed north and terrorised Upper Egypt. The Life of the famous Shenute by Bêsa and the writings of the archimandrite himself frequently refer to the Blemmyes and Nobatae (or Anouba) in the neighbourhood of the White Monastery which maintained, on one occasion, twenty thousand men as well as women and children who had been rescued from the Blemmyes, for a period of three months.<sup>6</sup> One passage in his works, however, throws a strange light on the Abbot's relations with the barbarian invaders.<sup>7</sup>

1. Woolley and MacIver, *Karanog*, Text, 96.

2. Stern's dating—7th century—is palaeographically improbable. See *Ä.Z.*, XIV, 70. Buecheler (*Rheinische Mus.*, XXXIX, 277) dates the poem to the reign of Marcian.

3. Wilcken, *Archiv. für. Pap.*, I, 396 ff.; Mitteis-Wilcken, *Chrestomatie der Papyruskunde*, 1912, no. 6.

4. Procopius, *History of the Wars*, I, XIX, 27–36; ed. Haury.

5. The Noubades or Nobatae were converted towards the middle of the sixth century by missionaries from Constantinople. The account is in John of Ephesus, *Eccles. Hist.*, Bk. IV. See below, p. 105, note 3.

6. Amélineau, 'Vie arabe de Schnoudi,' in *Mém. Miss. Arch. Fr.*, IV, 396. For the Nubians in Upper Egypt, see Leipoldt, 'Berichte über Einfälle der Nubier in Ägypten' in *Ä.Z.*, XL, 126 ff.

7. Chassinat, in *Mém. Inst. Fr.*, XXIII, 83, 84. The editor is of the opinion that the

‘How blessed is the whole flock and all the flocks of Christ, in that they follow after Him; for they know Him to be the God of Truth; would that these friends sitting here, that belong unto the Belhemou (Blemmyes) and the Nouba, too, would mingle with us and follow after Him! that is, would know Him to be God. For we have suffered them to mix with us and to come in unto God’s House, that perchance they might come to reason. Can they, then, not know what the Psalmist writes, “the idols of the heathen are silver and gold.”’

Shenute and his monastery seem to have enjoyed a special immunity from the attacks of the Belhemou and the Nouba.<sup>1</sup> Even so, one feels a certain admiration for the doughty archimandrite who could thus admit the destroyers of the churches on Philae and Elephantine to the sacred precincts of his convent. But the Blemmyes, at any rate, may have had good reason to fear the miraculous powers of this remarkable man.<sup>2</sup>

Florus, Governor of the Upper Thebaid, was, however, of less trustful nature. In 451, exasperated by the unceasing ravages of these southern tribes in his province, he combined with Maximinus, Master of the Soldiers in the East, in an organised campaign against them.<sup>3</sup> Perhaps he was the Duke of the Thebaid who, according to the *Life of Shenute* by Bêsa, came to consult the archimandrite<sup>4</sup> and to seek his blessing on the campaign. Apparently the tribes were driven out of Upper Egypt, but the victory, if so it can be called, proved less of a triumph than Shenute had prophesied. It was some time before the Blemmyes and the Nobatae were prepared to agree as to the terms of the peace. Priscus, an eye-witness, has left a full account of the subsequent negotiations.<sup>5</sup> To begin with, they would only consent to a truce which was to last as long as Maximinus remained in Egypt.

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present text was copied from an earlier and authentic version of Shenute’s works. See Introduction, p. 4.

1. There is no record in the archimandrite’s works or in his *Life* by Bêsa of an actual attack on the White Monastery.

2. Cf. the anecdote in Amélineau, *op. cit.*, 49 (‘Vie Copte de Schnoudi’), where the Abbot casts a spell over the Blemmyes, paralysing their limbs and compelling them to give up their prisoners and plunder.

3. Priscus, *Fragmenta*, 153-154. *Corpus Scriptorum Historiae Byzantinae*, Bonn, 1829.

4. Amélineau, ‘Schnoudi’; *Coptic Life*, 70; *Arabic Life*, 411. Shenute died in 451-2. Sulpicius Severus mentions a Roman general who, before going forth to attack the Blemmyes, first consulted St. John of Lycopolis as to whether he would conquer the Blemmyes (Ethiopians) who were then ‘in the neighbourhood of Syene.’ Cf. Sulpicius Severus, cited in Ladeuze, *Étude sur le cénobitisme pachomien*, 247. Some writers—Woolley and MacIver, *Karanog*, Text, 96; Revillout, *Mémoires sur les Blemmyes*, 409—have identified the general with Maximinus or Florus. But Sulpicius died, at the latest, in A.D. 429.

5. Priscus, *Fragmenta*; ed. Niebuhr-Bekker, Bonn, 1829, 153-154.



When this suggestion had been curtly refused, they proposed a truce which would terminate with the death of Maximinus. Eventually, however, they were compelled to agree to a peace of a hundred years with the stipulation that all the prisoners and the plunder which they had captured during the course of the war should immediately be returned to the Romans. In return, they were to be permitted to visit the Temple of Isis at Philae and, at stated times, to remove her statue to their own country that they might consult the oracle; a remarkable concession from a Christian general in view of the edicts against paganism of Theodosius and his successors.

The treaty was ratified within the walls of the Temple of Isis at Philae. Shortly afterwards, however, Maximinus died and the tribes at once considered that they were no longer bound to keep the peace. But Florus, now Prefect of Egypt, returned to the attack, and finally, in 453, compelled the invaders to come to terms.<sup>1</sup>

The Blemmyes and Noubades, finally subdued, presumably withdrew to the south of the First Cataract. The Blemmyes still held the country as far as Ibrîm, while to the south of this point, as we learn from a contemporary inscription, were the Noubades with whom they had been in alliance during the campaign in Upper Egypt. The great inscription at Kalâbsha—set out in Greek on the façade of the Hall of Columns in the Temple of Mandûlis—records the victory of Silko, King of the Noubades, over the Blemmyes, whom he claims to have driven before him from Ibrîm, their southern frontier, as far as Shellâl.

The text, given below, has been fully examined elsewhere.<sup>2</sup> Here, it will be sufficient to consider its historical implications as regards the Blemmyes.

‘I, Silko, King of the Noubades and of all the Aethiopians, went to Talmis and Taphis once. Twice I fought with the Blemmyes and God gave me the victory. After the third time, once and for all, I conquered them again and made myself master of their cities. I established myself there with my troops for the first time. And they made supplication to me and I made peace with them. And they swore to me by their gods and I trusted to their oath that they were

1. For a full account, see Milne, *Egypt under Roman rule*, 100. London, 1924.

2. See the full bibliography and textual criticism in Kraus, *Die Anfänge des Christentums in Nubien*, 100-109. The translation is based on the text as given by Gauthier, *Temple de Kalâbsha*, 204-205.



honourable men. Then I went back into my own Upper Country. When I became King I did not follow after other kings but (went) ahead of them.

As for those who strive with me, I do not permit them to sit in their own country unless they esteem me and do homage to me. For in the Lower Country I am a lion and in the Upper Country a bear.

I warred with the Blemmyes from Prîm<sup>1</sup> to Telêlis<sup>2</sup> once and for all, and the others south of the Noubades<sup>3</sup> I ravaged their lands since they contended with me.

The lords of the other nations who war with me, I do not allow them to sit in the shade but outside in the sun, and they cannot take a drink of water in their own houses; as for those who resist me, I carry off their women and their children.'

The text makes it clear that Silko directed his attack from the south. Having, after his first successful expedition, sworn the Blemmyes to peace, he then retired to the 'Upper Country,' namely his own territory to the south of Ibrîm, the Blemmye frontier. As to the date of the inscription, there has been considerable difference of opinion among the numerous authorities.<sup>4</sup> The text itself contains no clue and palaeography is our only guide. Letronne,<sup>5</sup> Dittenberger,<sup>6</sup> Krall,<sup>7</sup> and Wessely<sup>8</sup> would place it in the sixth century. Wilcken, however, after a close and detailed study of the letter forms, considers that it cannot be later than the fifth.

'Krall setzt die Silkoinschrift mit Wessely ins VI. Jahrhundert. Vergleiche ich die Schrift mit der oben besprochenen Inschrift von Talmis, so will mir die Silkoinschrift altertümlicher erscheinen. Freilich ist der verschiedene Grad von Sorgfalt, der der Wichtigkeit des Gegenstandes entspricht, zu berücksichtigen. Ich glaube nicht, dass die Silkoinschrift jünger ist als V. Jahrhundert. . . . Silkos sieg ist sonach wohl nur eine Episode in der Blemyschen Okkupation von Nubien gewesen. Sonach wäre höchstens auffällig, das die Blemyer nicht die Siegesinschrift des Feindes entfernt haben. Doch das allein kann nicht entscheiden, zumal, wie mir Freund Steindorff als Augen-

1. *I.e.* Ibrîm. Prîm is probably the correct Nubian and Coptic form. See Griffith, 'On the early use of cotton in the Nile Valley,' in *Journal of Egypt. Archaeology*, XX, 8.

2. *I.e.* Shellâl, from the Meroitic Salêle. Griffith, *Mer. Inscript.*, II, 30.

3. There is no justification for Budge's version, 'and of the other Noubades in the south.' See *A History of Ethiopia*, I, 115.

4. For the collected opinions, see Kraus, *loc. cit.*

5. Letronne, *Œuvres Choisies*, I, 8 (first series, Paris, 1881).

6. *Orientalis Inscriptiones Selectae*, I, 303. Leipzig, 1905.

7. *Beiträge zur Geschichte der Blemmyer und Nubier*, 12. In *Denkschr. Akad. Wien*, Bd. 46; *Abhdlg.* 4. Wien, 1900.

8. In *Studien zur Paläographie und Papyruskunde*, 132.

zeuge erzählte, die Silkoinschrift an unscheinbarer Stelle steht, sodass man sie nicht ohne weiteres findet.'<sup>1</sup>

The inscription from Talmis referred to by Wilcken<sup>2</sup> is a curious list of Blemmye names associated with the Blemmye god Mandûlis. If this list is, as Wilcken believes, later than the inscription of Silko, it would suggest that the latter's victory over the Blemmyes was not final and that they continued to inhabit Talmis (Kalâbsha).

As to the general date of the Silko inscription, Wilcken's opinion is of the greatest value. On the other hand, if a date in the fifth century be accepted, the latter half of the century seems the more likely. For it will be remembered that, according to Priscus, Blemmyes and Noubades were allies as late as 453. With regard to the theory that the victory over the Blemmyes was not complete, it seems most improbable that, in this case, the inscription would not have been effaced. On the contrary, not a line has been damaged. Indeed, the whole is remarkably preserved. The suggestion that its position renders it not easily perceptible is not convincing. Standing some two metres from the ground on the façade of the pronaos, the inscription of Silko is, as M. Gauthier remarks, one of the longest and best preserved texts in the Temple at Kalâbsha.<sup>3</sup> Immediately beneath the text a most interesting graffito represents the King of the Noubades himself.<sup>4</sup> Silko is shown mounted on a gaily caparisoned horse, hung with phalerae round the neck and along the flanks. In his left hand he holds a lance, with which he has transfixed his enemy, who is shown prostrate in the dust. In the meanwhile a Winged Victory, floating above his head, crowns him not with the Roman laurel wreath but with a very curious head-dress made up of Egyptian emblems; the horns of the Ram-god, Khnum; the corn-sheaf of Isis, the feathers of Ma'at, and the royal Uraei.<sup>5</sup> The king is dressed in the fashion of the later Roman emperors with a short tunic of mail, reaching to the knees, and a paludamentum flying out from the shoulders.

Towards the end of the fifth century, then, the Blemmyes were

1. In *Archiv. f. Papyrusforschung*, I, 419, note 2.

2. In *Archiv. f. Pap.*, I, 412-417.

3. Gauthier, *Temple de Kalâbsha*, loc. cit.

4. Gauthier, *op. cit.*, II, Pl. 72 (B).

5. This crown is exactly similar to those of silver recently found by the Archaeological Survey of Nubia in royal Nubian tombs at Balâña. Cf. *Illustr. London News*, July 24, 1933.

driven from the Nile valley and Lower Nubia became part of the Kingdom of the Noubades. The Blemmyes seem to have withdrawn once more to the Eastern Desert. Procopius, writing about A.D. 543, says :

‘From the city of Auxomis to the Egyptian boundaries of the Roman domain . . . is a journey of thirty days . . . within that space many nations are settled and among them the Blemmyes and Nobatae. . . . But the Blemmyes  *dwell in the central portion of the country*  while the Nobatae possess the territory  *about the River Nile.* ’<sup>1</sup>

Towards the end of the fifth century the Blemmyes recommenced their traditional raids on Upper Egypt. The Syriac Chronicle of Joshua the Stylite,<sup>2</sup> composed about A.D. 507, records a number of such attacks by Blemmyes on Egyptian territory between the years 492–497, in the reign of Anastasius and coinciding with the so-called revolt of the Isaurian militia. Early in the sixth century a similar raid seems to have been directed against the town of Antaiopolis. In a papyrus from that town—in the form of a complaint by the inhabitants to the Duke of the Thebaid concerning the exactions of the strategos, Florentius—the writer laments that the town has never recovered from an attack by the Blemmyes in the ‘days of our ancestors,’ when the barbarians had destroyed the public baths (δημόσια λουτρά) and left the city in ruins.<sup>3</sup>

The Blemmyes were, in the sixth century, still receiving an annual subsidy from the Romans on condition that they refrained from molesting the frontier.<sup>4</sup> Now, an additional inducement to keep the peace was offered them in the form of a grant of land within the Roman province.

In 1887 M. Grébaut bought from a native at Gebelein, some twenty-five miles south of Thebes, a number of goat-skin documents, inscribed in corrupt Greek.<sup>5</sup> In the first of these, Charachen, King of the Blemmyes, entrusts to his sons Charapatchour and Charahiet the

1. Procopius, *History of the Wars*, I, XIX, 27–36; trans. in Loeb edition. Cf. also the *Ecclesiastical History* of John of Ephesus, trans. Payne-Smith, 319, where the Blemmyes (c. A.D. 580) are described as then inhabiting the eastern deserts.

2. Trans. W. Wright (Cambridge, 1882), p. 13.

3. P. Cairo, 67009; published by J. Maspero in *Papyrus Byzantins*, I, 37–39; cf. Rouillard, *L'Administration civile de l'Égypte byzantine*, 113, note 4.

4. Procopius, *History of the Wars*, I, XIX, 31.

5. See Krall, ‘Beiträge zur Gesch. der Blem. und Nubier,’ *loc. cit.* Wilcken, in *Archiv. f. Pap.*, I, 419, note 2, would place them in the sixth century.

government of the island of Tanare, instructing them to safeguard it against any infringement of rights on the part of Rome.

‘I, Charachen, King of the Blemmyes, write to my children Charapatchour, Charachen, and Charahiet, ordaining that you may be given the guardianship of the island called Tanare and let no man, so it please you, stand in your way. And if the Romans do not treat you with justice and pay no regard to our customary rights, neither the phylarch nor the hypotyrannus will be prevented from falling on the Romans until the customary rights of our island are observed.’

In the second letter, another Blemmye king, Pakytimne, appoints a priest governor of the same island.

‘I, Pakytimne, King of Kings, write to Poae, most noble of priests. The curatorship of the island of Temsir, called Tanare, I have given into your keeping now and for all time.

Written by me, Agathonos, secretary, 23rd Athyr, Indiction II.’

There is little doubt that the island of Tanare referred to in both these documents was situated in Roman territory. For, since the withdrawal of the frontier to Syene, the Romans no longer had rights over Lower Nubia.<sup>1</sup> It is equally clear from the text of the first letter that the Blemmyes held the island in fief from Rome. There must have been some good reason for thus permitting the marauding Blemmyes to settle in Egypt. In Ptolemaic times, like the Meja, the Blemmyes had their uses as mercenary troops. A passage in the *Acta Sanctorum* suggests that the Blemmyes were so employed by Justinian.

‘Nos per Coptum et Beronicem immittemus Blemmyorum et Nobadum copias multas, et transibunt hae per terras tuas, atque Homeritam et regnum ejus universum ad omnipodam ruinam et maledictionem adducent.’<sup>2</sup>

Justinian, who saw in his championship of Christian Axûm against the rising power of the Jewish Himaryites an opportunity of still further extending the boundaries of his empire, must soon have realised the value as mercenaries of the Eastern Desert tribes whose territories extended to the very borders of Abyssinia. The grant of the island of Tanare may well have been a reward for their services to the Byzantine state for which the way had been prepared, as we shall see,

1. See Krall, *op. cit.*, 8.

2. *Acta Arethae et Sociorum*, 24 Oct.; ed. Carpentier, 743. See Kraus, *op. cit.*, 108. According to Carpentier, the earliest date would be A.D. 565.



by their (at any rate, nominal) conversion to Christianity towards the middle of the sixth century.

### III

#### THE BLEMMYES AND NUBIANS AND COPTIC CHRISTIANITY

When first we hear of the Blemmyes in history they were, we are told,<sup>1</sup> vassals of the Ethiopians or Meroites, and it is probable that they remained, at least nominally, subject to the Kingdom of Meroë until the third century of our era.

It is, therefore, not surprising to learn from Procopius, the Byzantine historian, that the religion of the Blemmyes was based on a theocracy of Graeco-Roman and Egyptian elements of the kind which found favour with the Meroitic people. The passage in Procopius is as follows :

‘ Now both these nations, the Blemmyes and the Nobatae, believe in all the gods in which the Greeks believe, and they also reverence Isis and Osiris, and not least of all, Priapus. But the Blemmyes are accustomed also to sacrifice human beings to the sun.’<sup>2</sup>

Isis and Osiris are both leading deities in the Blemmye temples at Ajûala and Kalâbsha<sup>3</sup>; Priapus was probably identified, as in Egypt, with Amûn, while there is every likelihood that the sun-god to whom the Blemmyes offered sacrifices was none other than Mandûlis, the god of the Eastern Desert tribes and more especially the patron deity of the Blemmyes. Nevertheless, while Mandûlis seems to have had a special place in the cult of the Blemmyes, they were to the last steadfast devotees of Isis. In their treaties with the Romans, access to her shrine at Philae was always one of their foremost considerations, as well, so Priscus tells us, as permission to carry away her statue at stated periods to their own country that they might consult her oracle.<sup>4</sup> This was a condition they insisted on in their treaties with Maximinus and Florus.<sup>5</sup> The pilgrimage to Philae was an annual event with the Blemmyes, and one of their priests, Smet, has left a record of his visit there in A.D. 448-449.<sup>6</sup>

1. Cf. Strabo, citing Eratosthenes; *Geography*, XVII, 1, 2. And Heliodorus, *Aethiopica*; trans. Underdowne, 238, 271.

2. Procopius, *History of the Wars*, I, XIX, 27-36; trans. in Loeb edition.

3. Griffith, *Journal*, XV, 74.

4. Priscus, ed. Niebuhr, 153.

5. See Milne, *op. cit.*, 100.

6. Wileken in *Archiv. f. Pap.*, I, 405.

At the time when Procopius was writing, about A.D. 545, the Blemmyes were still pagans. But before the close of the sixth century, most probably during the reign of Justinian, they appear to have forsaken their ancient gods and, at least nominally, like so many other tribes on the borders of the empire, to have embraced the official religion.

The evidence for this conversion to Christianity of the Blemmyes is contained in a papyrus first published by J. Maspero<sup>1</sup> and commented on by Wilcken,<sup>2</sup> who was the first to see its true implications. The Greek text is full of difficulties and a literal interpretation is not easy. It is in the form of a request addressed to the Duke of the Thebaid, then Flavius Marianus, by the officials of the town of Ombos<sup>3</sup> for the punishment of a certain Kollouthos who, besides being suspected of paganism, had allied himself with the Blemmyes and incited them to attack the town. Kollouthos, moreover—he was probably the pagarch mentioned in P. Cairo, 67005, l. 20<sup>4</sup>—seems to have offered to reopen (διακαινίσασθαι: renew) the Temple of Philae, once frequented by the Blemmyes but now closed by order of Justinian, as an inducement to the tribe to join forces with him in an attack on the town. And this, in spite of the fact that, in so doing, the Blemmyes would be persuaded to cease (literally ‘change, or turn from’; ὑπεστρέφοντο) from acknowledging the Everlasting God (τὸν αἰδίου θεόν); i.e. that they would revert to paganism. The implication, that the Blemmyes had already been converted to Christianity, is clear.

The important question, then, is the date of this papyrus. Procopius, in his *History of the Wars*, describes the closing of the Temple of Isis in the following words:

‘These sanctuaries in Philae were kept by these barbarians (i.e. the Blemmyes and Nobatae) even up to my time, but the Emperor Justinian decided to tear them down. Accordingly Narses, a Persarmenian by birth, whom I have mentioned before as having deserted to the Romans, being commander of the troops there, tore down the sanctuaries at the emperor’s order, and put the priests under guard and sent the statues to Byzantium.’<sup>5</sup>

1. Maspero, *Papyrus grecs d’époque byzantine*, I, no. 67004. It forms one of the great find of papyri of the sixth century from Aphrodito, of which a collective study was published by Maspero in *Bull. de l’Institut. français*, VI, 74.

2. Wilcken in *Archiv. f. Pap.*, V, 444; *Grundzüge*, I, 134.

3. Probably Kôm-Ombo rather than Ombo near Dendera. Cf. Maspero, *op. cit.*, 16.

4. Wilcken, *Archiv.*, V, 444.

5. Procopius, *History of the Wars*; trans. Loeb, I, XIX, 27-36.

Narses, originally a Persian subject, went over to the Romans in A.D. 530.<sup>1</sup> This fact, recorded by Procopius, gives a *terminus post quem* for the closing of the Temple. The exact date of the closing is not known, but Narses, having served for two years first on the staff of the general Belisarius and subsequently on that of the Prefect Athanasius,<sup>2</sup> departed for Persia, where he met his death in A.D. 543. The Temple of Isis, then, was closed at some time between A.D. 530 and 543.<sup>3</sup> The papyrus, therefore, should not be earlier than 530, though it might be later than 543. Wilcken, on other grounds, dates the papyrus to about the middle of the sixth century.<sup>4</sup>

Before that date, then, the Blemmyes had already been converted to Christianity. Between A.D. 540 and 548 a missionary, Julian, was sent to Nubia from Constantinople at the instigation of the Empress Theodora to convert the Nobatae, who then inhabited the Nile valley immediately to the south of the Egyptian frontier.<sup>5</sup> It is not unlikely, therefore, that the Blemmyes also were baptized then and instructed in the monophysite doctrines, for their territory touched Nubia to the west.

However that may be, the Blemmyes were sufficiently well-disposed towards Christianity for them to be entrusted, in A.D. 580, with the safe keeping of the missionary Longinus, who was then on his way to Alodia, the southernmost Nubian kingdom, by way of the Eastern Desert so that he might avoid the hostile tribes of the Makoritae.<sup>6</sup> It is possible that Longinus, during his journey through their country, himself completed the conversion of the Blemmyes. This may indeed be suggested by a passage in the Ecclesiastical History of the twelfth-century writer Michael the Syrian :

‘Longinus s’enfuit dans le pays de . . . (Lwgm̄n); où il était célèbre comme évêque, chez un peuple appelé Blemmyes.’<sup>7</sup>

The story of the conversion of the Blemmyes to Christianity is not complete without a reference to the remarkable passage from the works

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1. Maspero, ‘Théodore de Philai’ in *Rev. de l’hist. des religions*, LIX, 299-317.
  2. Maspero, *loc. cit.*
  3. Maspero (*Bull. de l’Institut. fr.*, VI, 86) would place the papyrus c. A.D. 535.
  4. Wilcken, *Grundzüge*, I, 134.
  5. Maspero, *Hist. des patriarches d’Alexandrie*, 233-266.
  6. John of Ephesus, *Ecclesiastical History*, Bk. IV, 53; trans. Payne Smith.
  7. Michael the Syrian, *Ecc. Hist.*, II, 300; ed. and trans. Chabot. This may explain the remark in Quatremère, *Mémoires*, II, 134, ‘il est fait mention d’un évêque des Blemmyes.’



of the famous Abbot of the White Monastery, Shenute. This passage, which has already<sup>1</sup> been given in full in another connection, is of interest as a record of an early attempt to convert the Blemmyes; but without success.

We have seen how the Blemmyes, once Christian, were recognised by the Imperial authorities and were given a grant of land in Egypt—the island of Tanare, probably that opposite Gebelein.<sup>2</sup>

Yet, despite the official conversion of the Blemmyes, paganism may not have ceased to exist among them, for one of the documents from Gebelein, referred to above, is in the name of a Blemmye king, Pakytimne, who states that he formally hands over the governorship of the island of Temsir or Tanare to the priest (ἱερεύς) Poae<sup>3</sup>; a term which is, however, also found in purely Christian documents.

This record of the conversion of the Blemmyes is of special interest in the light of the many practices among the Beja of to-day which have been thought, as we have seen,<sup>4</sup> to indicate the former existence of Christianity among these desert tribes.

Like the Blemmyes, so we are told by Procopius,<sup>5</sup> the Nobatae believed 'in all the gods in which the Greeks believed,' and, like them, worshipped Isis, Osiris, and Priapus (Amûn).<sup>6</sup>

Like the Blemmyes, too, the Nobatae very probably adopted the religion of the Meroites, with whom, before their final migration to the country below the Third Cataract, they had been living in close contact during the first half of the fourth century of our era.<sup>7</sup>

1. See page 82.

2. See page 87. Krall, *op. cit.*, 25, considers that these Blemmye documents from Gebelein date from the late fifth or early sixth century (cf. note by Wessely in Krall, *op. cit.*, 25, 26). Wilcken, on the other hand (in *Archiv. f. Pap.*, I, 19, note 1) would place them in the sixth century, while Preisigke, the latest authority (in *Wörterbuch*, III, 269; published 1931), suggests a date in the seventh century.

3. In each case these documents (see Krall, *op. cit.*) are prefaced by a Cross. In the case of Doc. I and II, the scribe's name is prefaced by a Cross; though it is true that in Doc. I the scribe, Sansnos, seems to have been an Egyptian. In Doc. I two witnesses with Blemmye names, Laize and Tiutikna, use Christian symbols as their marks. But in the case of the King, Charachen, his mark is not in the form of a Christian symbol. At any rate, it seems safe to assume that Christianity had reached the Blemmyes, and it is probable, therefore, that the date of these documents is at least as late as A.D. 550, the date proposed by Wilcken for the Aphrodito papyrus, 67004. In view of the passage from the *Acta Sanctorum*, quoted above, describing the Blemmyes as allies of Justinian, the documents may be as late, if not later than, the second half of the sixth century. Indeed, the date proposed by Wessely seems on historical grounds to be the least probable. For the passage from the *Acta Sanctorum*, see *Acta Arethae et Sociorum*, X, 743, Antwerp, 1643. For the date, see Kraus, *Die Anfänge des Christentums in Nubien*, Vienna, 1930, 108, note 74. For ἱερεύς in Christian documents, see Crum, *Rylands Coptic Papyri*, 256.

4. See page 75.

5. Procopius, *History of the Wars*, I, xix, 27-36.

6. See page 88.

7. See Junker in *Mitt. Kairo*, 3, 155 ff.



The 'official' conversion of the Nobatae to Christianity in the sixth century and the opposing views as to the form of Nubian Christianity, whether monophysite or dyophysite, before the eighth century, have been discussed elsewhere.<sup>1</sup> It may, therefore, in this connexion be of some interest to describe what seem to have been one or two previous attempts to convert the Nubians.

We have already seen how the famous Shenute permitted the Blemmye and Nubian raiders to enter his monastery in a vain effort to convince them of the error of their ways.<sup>2</sup>

A rather similar tradition of Nubians in an Egyptian monastery and of the immunity of the monastery from their attacks is contained in a curious collection of Arabic tales, alternatively called 'The Paradise of Delight,' 'The Garden of Monks,' or 'The Forty Stories of the Monks of the Wadi Hubaib and others.'<sup>3</sup>

Since these stories have 'not been related to the few known facts of Nubian history,'<sup>4</sup> it is thought worth while to give in full the relevant extracts and to ascertain to what period they refer.

The thirty-second and thirty-third stories in this collection concern a prophecy made by a monk Mercurius to Anastasius, Abbot of St. Pachôm's monastery at Pbow (Fâu), concerning the arrival of raiders from 'the land of the Nubians,'<sup>5</sup> who would attempt to destroy the monastery but in vain. Mercurius instructs Anastasius to entertain the raiders on their arrival with food and drink (much in the way that Shenute entertained the Blemmyes and the Nubians), and foretells that they will, in return, give him a deed of protection for the monastery and all within it. He then bids the Abbot and his future successor in the office take careful note of the leader of the Nubian band, for, 'By night shall he come and shall enter into this monastery and become a monk here and a saint; and there shall be unto this monastery great mercy from God that sent him hither.'<sup>6</sup> The thirty-third story then relates how the Nubian raiders came into Egypt even as Mercurius had foretold:

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1. Monneret de Villard, *Aegyptus*, XII, *loc. cit.*; Duchesne, 'Les Missions chrétiennes au sud de l'Empire romain,' in *Mélanges d'archéologie et d'histoire*, t. XVI (1896), 84-85; Kraus, *Die Anfänge des Christentums in Nubien*. Mödling bei Wien, 1930.

2. Chassinat, *Mém. de l'Institut. fr.*, XXIII, 83, 84.

3. Crum, 'A Nubian Prince in an Egyptian Monastery,' in *Studies presented to F. L. Griffith*, Oxford, 1932, p. 137 ff.

4. Crum, *op. cit.*, 140.

6. *Op. cit.*, 142.

5. *Op. cit.*, 142.

'Lo, there came to us a great horde of this Abyssinian folk,<sup>1</sup> the children of Ham . . . and they encamped within the monastery and we suffered no hurt from them. And we brought forth meat unto them and they did eat and drink and they drank. And when they were minded to move on, the chief among them gave unto this monastery an undertaking and it was a tablet of yellow brass, whereon were three lines in the Greek character<sup>2</sup> and therein it was thus: "I, Kafrîr, son of the brother of Ghâyân, son of Marwâ,<sup>3</sup> son of Salbân, have written this tablet for this monastery. I warn whoso shall do it harm or lay hands on its victuals or its possessions or aught else, that he shall go unto perdition."'<sup>4</sup>

In accordance with Mercurius' prophecy, after three years the Nubian chief returned, was duly recognised, and admitted to the monastery once more.

'And having entered the church, he stood before the sanctuary and prayed. And when he had made an end of praying he turned him about and said unto me: "I would that thou show me the chief man of this monastery." Now he was a barbarian and one of his servants interpreted for him.<sup>5</sup> And I said unto him: "What wouldst thou of him?" And he said: "When I see him, then will I tell him what I would have of him!" And I said unto him: "I am he." And he sat down and caused me to sit, and he brought forth from amid his garments that which hung about his neck upon his breast, a picture upon red gold, graven with an iron pen, and it was a picture of our saintly father, Abba Pachôm. And I marvelled and said: "O master, know ye then in your land the saintly Abba Pachôm?" And he said: "Yea, for there journeyed through our land a young monk, clothed in woollen raiment, in whom we beheld much sanctity. And he preached in our land, and said, 'My spirit went to Heaven and I saw the people of punishment such as were there, and I saw the people of grace, such as were there; and many a marvel was revealed.'",',

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1. *Op. cit.*, 145, note 3. MS. B has 'Nubian,' MS. D, 'Ethiopian.' Cf. the passage in Shenute's works discussed by Leipoldt, *Ä.Z.*, 40, 126, where the Nubians are termed Ekosh. Makrîzî—*Khitat*, trans. Bouriant, 544—decided that the Nubians were either Abyssinian by origin or descended from Ham, the son of Noah.

Kafrîr, the hero of this story and leader of the 'Abyssinian folk,' is called 'nephew of the King of Nubia' (En-Nûba) in the Synaxarion for the 23rd Koiak. Cf. *Patr. Orient.*, I, 514 (438). It seems certain, therefore, that the story refers to the Nubians and not the Blemmyes.

2. The inscription of Silko is in Greek; does this mean that Nubian was not, as yet, a written language? The tablet seems designed to be read by subsequent Nubian raiders.

3. *Mar-*, *Ma-* are common prefixes to Nubian proper names. Cf. Griffith, *Nubian Texts*, 128. MSS. B and D have 'Marwân.'

4. Crum, *op. cit.*, 145.

5. Cf. Budge, *Misc. Coptic Texts*, 992; where the Egyptian monk says, 'And I said to him, "Dost thou understand the language of the Nubians?"',

Anastasius recognises in the monk referred to his spiritual son, Mercurius. Eventually, the Nubian is received into the Order, escaping very narrowly the infuriated inhabitants of the neighbouring villages who had already suffered much at the hands of Kafrîr's fellow-countrymen.

The tale has a certain naïve charm and is full of interest. The chief point, however, is the date of these events, if indeed the document has any historical significance. The earliest of the known Nubian raids on Egyptian territory is that mentioned in the papyrus of Appion (c. A.D. 425-450) against the churches of Philae.<sup>1</sup> On the other hand, there is no record of a Nubian expedition in Egypt after the treaties signed in A.D. 453 with Maximinus and, in the following year, with Florus.<sup>2</sup> By these treaties, the Nubians agreed to keep the peace for a hundred years. It is unlikely, moreover, that the tale refers to a raid against Islam for, by that time, the Nubians had ceased to be pagans. Nubia, in fact, became the stronghold of Christianity in the south, and they would, therefore, hardly be likely to raid a Christian monastery. All the known Nubian raids seem to have occurred during the first half of the fifth century, and this is, no doubt, the period to which this group of stories refers.<sup>3</sup> Though there is, apparently, no internal evidence as to the period to which the Nubian pieces relate, the other stories in the collection are said to refer to the seventh century.<sup>4</sup> But, for those quoted above, this would be a most unlikely date, for the Christian Nubians at that time were far too much concerned about the defence of their country from a succession of attacks by the Persian and the Arab invaders<sup>5</sup> to have had the opportunity to advance into the Thebaid.

It is difficult to separate fact from fancy in such tales and there seems to have been a good deal of deformation of personal names by

1. Wilcken, *Archiv.*, I, 396-407.

2. Priscus, ed. Niebuhr, 153-154.

3. Cf. the presence of the Nubians in Shenute's monastery; Chassinat, *op. cit.*, 83, 84. Also Leipoldt, *Ä.Z.*, 40, 126. The latter, a passage from Shenute's works, is of doubtful value and probably refers to a raid by the Mazikes of the Western desert. See Monneret de Villard, *Couvents près de Sohag*, I, 20. For the Mazikes, see references in Evelyn-White, *History of the Monasteries of Nitria and Scetis*, 492.

4. See Crum, *op. cit.*, 139.

5. For the Persians in Nubia, see Winlock and Crum, *Monastery of Epiphanius*, I, 100. There is a story that the Arabs, before the arrival of 'Abdullah Ibn Sa'ad in 641-2, came into contact with the Nubians and the Beja at Bahnasa (Oxyrhynchus)—see Burckhardt, *Travels* (1819), 528—but the story is of doubtful worth.



the Muslim scribe,<sup>1</sup> but it may be that the tradition of the visit of the monk Mercurius to Nubia is based on some reminiscence of an early attempt to convert the Nubians.

In view of the part it played in the 'official' conversion of the Nubians, something must be said of the history of Christianity on the northern frontier of Nubia, at Philae and Aswân, and the part played by the Christian community there in paving the way for the arrival, in the sixth century, of the missionaries from Byzantium.

The most valuable document for the history of early Christianity in the Cataract region is the Coptic text, already cited in another connection, *The History of the Monks in the Egyptian Desert*, by an ascetic, Paphnutius, who may be the Paphnutius Cephalæ, author of the *Life of St. Onnophrius*, who flourished in the fourth century and was a contemporary of Pachomius.<sup>2</sup> The document may, it seems, be based on a reminiscence of a fourth-century mission to Lower Nubia or upon some catalogue of the early bishops of Philae, for the name of one bishop, Mark, coincides with that of an occupant of the See under Athanasius (A.D. 344-390), and he is mentioned in a letter written in 362 by the Patriarch to the faithful at Antioch relative to the Council of Alexandria.<sup>3</sup>

In the main, these stories concern the visit paid by Paphnutius to an aged monk called Isaac, who lived on an island in the First Cataract and who had been a disciple of a famous hermit of that region called Apa Aaron. Isaac tells Paphnutius what he has learnt from Apa Aaron and a Roman official called Macedonius of the early days of Christianity in the neighbourhood. At that time, the inhabitants of Philae were worshipping the Hawk,<sup>4</sup> whose shrine was within the Temple, and the few Christians there, persecuted by their neighbours, were visited once a week by the monks of Syene who administered

1. There is a tradition, most probably based on fact, related by El-Mas'ûdi and others, that 'Abdullah, the son of Marwân, last of the Ommayyad caliphs (744-750), fled, on the fall of the dynasty, to the Sudan where he married the daughter of a local king. Cf. MacMichael, *History of the Arabs in the Sudan*, I, 162. A name Kafri is that of a nephew of the King of Nubia (cf. note by Crum in Griffith, 'Faras,' in *Liverpool Annals*, XIV, 93) and a graffito mentioning 'The monk To Kaphri' occurs on the walls of the Northern Church at Faras. Cf. Griffith, *op. cit.*, 93.

2. Budge, *Misc. Coptic Texts*, Introduction, cxlv.

3. Cf. Monneret de Villard, *Il Monastero di S. Simeone presso Aswân*, I, 142.

4. The hawk-headed god, Horus; cf. Strabo, *Geography*, XVII, I, 49. Marinus, in his *Vita Procli* (written c. A.D. 486), says that the inhabitants of Philae were still, at that time, worshipping Isis: 'Ἰσιν τὴν κατὰ τὰς Φιλὰς ἐν τιμωμένῃ. Cf. *Vita Procli* (ed. Boissonade, Leipzig, 1814), 16. See also Spiegelberg in *Archiv. f. Pap.*, XVII, 188.



the sacraments to them. Macedonius, the Roman official, learning of this state of affairs, sent a report to Athanasius, Patriarch of Alexandria, who consecrated him Bishop of Philae that he might further the cause of Christianity there. After Macedonius, the See was held by Mark and Isaiah, also consecrated by Athanasius, and by Pseleusius, consecrated by the Patriarch Timothy (A.D. 396-402).

The chief point of interest in these tales is the friendly relationship between the clergy and the Nubians, who were so impressed by the miracles performed by Apa Aaron and his colleagues that 'they believed' and 'went forth, glorifying God.'<sup>1</sup>

The Arabic Synaxary<sup>2</sup> gives the names of bishops which cover the period between the fourth and sixth century, while the Leyden papyrus, giving the name of Appion, Bishop of Syene, Contra Syene, and Elephantine in the second quarter of the fifth century, proves that there were, at that time, churches on the island of Philae.<sup>3</sup>

Thus, when the first missionaries arrived, they found in the region of the First Cataract a flourishing Christian community.<sup>4</sup> In Philae, nevertheless, paganism survived until the Temple of Isis was closed in the reign of Justinian and re-dedicated in honour of the martyr, St. Stephen.

Certain phrases in the inscription of Silko at Kalâbsha suggest that the Nubian king employed a Christian or, possibly, a Jewish<sup>5</sup> scribe, though one is hardly justified in thinking, with Letronne and others, that the king himself had already been converted.

When, therefore, the missionary Julian arrived in Nubia, some, at least, of the Nubians may have been not unacquainted with the doctrines of Monophysite Christianity.

1. See Budge, *op. cit.*, 993, 1005.

2. Ed. Basset, *Patr. Orient.*, III, 276-277; cf. Monneret de Villard, *Aswân*, I, 145-6.

3. Wilcken, *Archiv. f. Pap.*, I, 396-407.

4. Cf. Munier in *Aegyptus*, July 1931, 257, for the funerary stelae from the Monastery of Abu Hâdrâ near Aswân. Five Greek stelae of the sixth century mention Nubians: nos. 5, 26, 49, 50, 52.

5. *E.g.* line 3: ὁ θεὸς ἔδωκέν μοι τὸ νίκημα; line 8: εἶδωλα αὐτῶν (Βλεμύων). See page 83. The opinions of the various authorities as to the significance of these phrases have been collected, with full bibliography, by J. Kraus in *Die Anfänge d. Christentums in Nubien*, Vienna, 1930, pp. 100 *seqq.* Wilcken, in *Archiv. f. Pap.*, I, 436, has shown that ὁ θεός was used in pagan papyri and was not, necessarily, followed by the name of a god. On the whole, his theory (*op. cit.*, 419) of a Christian or Jewish scribe best fits the evidence.

## IV

THE DEVELOPMENT OF CHRISTIANITY IN LOWER NUBIA IN THE  
SIXTH AND SEVENTH CENTURY

The reign of Justinian is marked not only by an elaborate effort to bring many of the pagan peoples on the borders of the empire within the body of the Church—a movement tantamount, in effect, to extending the boundaries of the Christian Empire—but also by an energetic attempt to stamp out the last vestiges of the old religions.<sup>1</sup>

In 529, the closing by Justinian of the famous philosophical school at Athens, whose influence had already been considerably weakened by the creation in the fifth century (in the reign of Theodosius II) of the Christian University of Constantinople,<sup>2</sup> cut at the very roots of pagan thought.

In a similar way, the closing of the Temple of Isis at Philae about A.D. 535, the removal of the statues by Narses, and the imprisonment of the priests,<sup>3</sup> struck an equally shrewd blow at the last rampart of paganism in the south. For generations Philae had been, for the Nubians and the nomad desert tribes, their chief place of worship, the 'Mecca' of countless pilgrims,<sup>4</sup> where treaty after treaty with the Romans had been ratified in the presence of Isis herself, and where even such Christian generals as Maximinus and Florus had been compelled openly to acknowledge their pagan gods, in direct violation of the decrees against paganism pronounced by Theodosius and Marcian.<sup>5</sup>

The importance attached by Justinian and Theodora to the conversion of the Nobatae—in the former's case the possibility of forging a link between Egypt and the Christian kingdom of Axûm had probably not been forgotten—acted as a spur to the Christian communities of the Cataract region. The second half of the sixth century saw the building of the churches of St. Victor and of the Blessed Mary at Aswân and of a church at Syene,<sup>6</sup> while it is probable that the great monastic

1. Cf. the excellent chapter in Vasiliev, *Hist. de l'empire byzantin*, I: 'La politique religieuse de Justinien,' 195-203.

2. Vasiliev, *op. cit.*, 198.

3. Procopius, *History*, I, XIX, 27-36; ed. Haury. The date is that suggested by Jean Maspero in 'Théodore de Philai': *Rev. de l'hist. des relig.*, LIX, 299-317.

4. Cf. *C.I.G.*, no. 4943; cited in Kraus, *op. cit.*, 24.

5. *Codex Theodosianus*, XVI, 10, 2; ed. Mommsen, Berlin, 1905, 897.

6. See Monneret, *Aswân*, I, 147.

foundation of Abu Hâdrâ (miscalled the Monastery of St. Simeon) on the west bank of the river was inaugurated about this time.

In the second quarter of the sixth century Theodore, who had been nominated Bishop of Philae by Timothy III, about A.D. 525-562,<sup>1</sup> formally re-dedicated the Temple of Isis in honour of the martyr, St. Stephen. The inscription commemorating this may still be seen on the temple walls.

‘ With the help of Our Lord, Jesus Christ, has the Bishop, Apa Theodore, well-beloved in God, transformed this temple into a sanctuary of St. Stephen ; in holiness, and through the might of Christ, under the most pious deacon and proestos, Posias.’<sup>2</sup>

The graffiti of three Christian Nubians recording their visit to the church may also be of this date.<sup>3</sup> These signatures of pilgrims are in the true tradition of their forebears, who left records on the temple walls of visits to the Shrine of Isis. Indeed, the drawing of a vase which follows the name of Theodosius is suggestive of offerings brought, in the pagan manner, to the Shrine of St. Stephen.<sup>4</sup>

In Nubia, too, the first result of the conversion of the people was the re-dedication of the temples. The pagan reliefs were hidden under a thick coating of plaster upon which were painted in the Byzantine manner the conventional representations of Christ and the Apostles.<sup>5</sup>

But it is to be doubted whether, in these early years, Christianity was at all widespread or had, indeed, anything but a superficial hold over the Nubians. Cosmas Indicopleustes, whose Nestorian leanings did not prevent him from rejoicing over the spread of monophysite Christianity, presents a glowing, but probably too highly coloured, picture of flourishing Christian communities in Nubia. Writing about A.D. 547 he says :

‘ Among the Nubians and the Garamantes . . .<sup>6</sup> there are everywhere churches of the Christians, and bishops, martyrs, monks and recluses, where the Gospel of Christ is proclaimed.’<sup>7</sup>

1. Cf. J. Maspero, ‘ Théodore de Philai,’ *Rev. de l’hist. des relig.*, LIX, 299-317.

2. Lefebvre, *Recueil des inscript. grec. chrét.*, no. 587.

3. See Lefebvre, *op. cit.*, nos. 588 and 590.

4. Lefebvre, *loc. cit.*

5. For Byzantine influence, see Griffith, *Liverpool Annals*, XIII, 52; and Crowfoot, ‘ Christian Nubia,’ in *Journal*, XIII, 145. Byzantine rather than Coptic influence is noticeable both in architecture and in the painted decoration.

6. For the conversion of the Garamantes, see Kirwan, ‘ Christianity and the Kura’an,’ in *Journal*, XX, 201.

7. *Christian Topography*, ed. McCrindle, 120.

About A.D. 559 the temple at Dendûr was converted into a church, the Coptic inscription there recording this transformation reading as follows :

‘ By the will of God and the command of the King, Eirpanome, and Joseph, the exarch of Talmis, zealous in the word of God, and by our receiving the Cross from the hand of Theodore, Bishop of Philae ; that I, Abraham, the humblest priest, should place the Cross on the day of the founding of this Church, which is the 27th day of Tobe, Indiction VII,<sup>1</sup> there being present Shai the Eunuch, and Papnute the Stepharis, and Epiphanius the Keeper of the Seal (?), and Sirma the Courier. May everyone that shall read these writings of his charity offer a prayer for me. 99†.’<sup>2</sup>

Two Coptic graffiti on the walls of the Temple of Kalâbsha may date from this period and may refer to the conversion of the temple there<sup>3</sup> :

- (i) ‘ I, Paul the priest, have prayed in this place for the first time.’
- (ii) ‘ Jesus Christ ! (A Ω.) I, Paul the priest, planted the Cross in this place for the first time.’ (A small Greek cross is engraved on the right of this inscription on a level with the second line.)

We have, unfortunately, no means of knowing when the remaining Nubian temples were transformed into churches, but it is probable that, by the end of the sixth century, there were few which had not been re-dedicated in honour of the Christian saints and martyrs.

As to the dates of the building of the first churches we are equally ignorant. For, with the possible exception of the Church of Mary at Ibrim, which may be as early as the late sixth or early seventh century, the majority of the Nubian churches now standing belong to a considerably later period. John of Ephesus, however, records that the missionary Longinus built a church for the Nobatae, and a church at Dongola is mentioned by Makrizî as having been bombarded by the Arabs in 651-2.<sup>4</sup>

More definite evidence as to the building of a church in Lower Nubia is given in a very interesting Coptic papyrus of late sixth century

1. January 22, 559 ; so Maspero in *Rev. de l'hist. des relig.*, LIX, 309.

2. The translation is that of Blackman in *Temple of Dendûr*, 36-37. This inscription was studied at length by Revillout, *Mém. sur les Blemmyes*, 1874. For an excellent bibliography, see Kraus, *Die Anfänge des Christentums in Nubien*, 111.

3. G. Maspero in *Annales du Service des Antiquités*, X, 5.

4. *Eccles. Hist.*, trans. Payne-Smith, 257. Cf. Lane-Poole, *Hist. of Egypt in the Middle Ages*, 21-23.



date.<sup>1</sup> This document has been described by the editor, Dr. Crum, as 'a part of those tales of wandering visits through the desert, paid by a devout admirer to the cells of various ascetic celebrities, and met with in the collections of Apophthegmata. . . . Here the scene is presumably in the far south, as certain of the characters are connected with Nubia.'<sup>2</sup> The relevant portions of the text are as follows :—

*Fol. I.*

' . . . I said unto him, " Seeing, then, that I have come to speak before thee, I desire that thou wouldst tell me of the life of all the brethren that are in the neighbourhood, as to whether there be any other to the south of us." He said unto me, " I came upon two brethren . . . among the Nubians (the name of one) of them being Thara . . ., (the name of) the other Jacob (?). . . . God sent them to (the bishop ?) Apa Hermias, that (he should teach them) to write. After that (?). . . . "'

*Fol. 2, recto.*

" . . . their request. Afterwards God heard their prayer and after some days their parents went to the war and were slain. But when the bishop heard the news, he fulfilled their request and gave them baptism. But when he heard of the fear of God (that dwelt ?) within them, he put upon them (the habit) of monkhood and (taught) them to write. And when . . . them all knowledge, (he gave them) ordination. . . . "'

*Fol. 2, verso.*

" . . . him and he grieved them not as to fulfilling their request, according as they had said. And they departed southwards to their place, distant from us about two days walk, when they had made for themselves a dwelling-place and a little church and therein they dwelt. . . . "'

One of the documents in the collection from which the above comes<sup>3</sup> is a sermon by Damian of Alexandria, who was Patriarch there from 578 to 605, which suggests a date in the last quarter of the sixth century as not unlikely for the manuscript quoted here.<sup>4</sup>

Archaeology has been, hitherto, of little assistance in enabling one to detect the early churches of Christian Nubia. This is partly due

1. Ed. Crum : 'Theological Texts from Coptic papyri,' no. 29. (*Anecdota Oxoniensa*, Semitic Series, Part XII.)

2. Crum, *op. cit.*, 167.

3. Crum, *op. cit.*, Preface.

4. Mr. Crum kindly sends me the following opinion : 'As to Bp. Hermias, I did not think 578 an unlikely date for that papyrus. . . . Perhaps a bit later would be more likely, though, in that case, not much.'

to the fact that but few of the great number of ecclesiastical buildings, churches, and monasteries which line the banks of the Nile in Lower Nubia have been fully studied and published,<sup>1</sup> and partly owing to the difficulty of dating such buildings, in the absence of dated or dateable inscriptions and graffiti, except on not very secure architectural grounds.

There are, however, certain exceptions. The great church in Ẓaṣr Ibrîm may be dated provisionally and on architectural grounds to the late sixth or early seventh century; the southern church at Faras, the capital of Christian Lower Nubia, may be of a similar period, for a fragment of parchment found there seems to date from the sixth or seventh century,<sup>2</sup> while the lamps are of the early type found in graves of the sixth or early seventh centuries at Ermenne, Ginâri, and in the western cemeteries at Faras.<sup>3</sup> The earlier of the two churches—one had been built on the foundation of an earlier church—at Buhen, opposite Wadi Halfa<sup>4</sup>—may, perhaps, date from the seventh century.<sup>5</sup>

On the other hand, there are a considerable number of cemeteries, or of groups of graves in cemeteries, which can safely be assigned to the early days of Christianity in Lower Nubia on the basis of the funerary formulae on burial stelae, the lamps of known types which are found in the niches of the superstructures, and not infrequently of dateable amphora types sometimes found in the graves themselves.<sup>6</sup>

Such early graves as those of the western cemeteries at Faras,<sup>7</sup> those at Ermenne,<sup>8</sup> those at Ginâri, near Tâfa,<sup>9</sup> and those of the great Christian necropolis to the south of Ẓaṣr Ibrîm<sup>10</sup> may with safety be assigned to the late sixth or to the early seventh century.

Nevertheless, although scattered Christian communities may have

1. At the time of writing, only the first part (containing an inventory of the monuments) of Prof. Monneret de Villard's magnificent work *La Nubia Medioevale* has appeared.

2. Mileham, quoting Crum, in *The Coptic Churches of Lower Nubia*, 34.

3. Mileham, *op. cit.*, Pl. 20, a, b, c. Cf. Griffith, *Liverpool Annals*, XIV, Pl. LVIII.

4. See Mileham, *op. cit.*, 49; the painted panel illustrated on Pl. I was considered by Butler, so Mileham tells me, to be of the seventh century. The style is not unlike that of the sixth-century frescos at Bawit.

5. According to Crum—in Mileham, *op. cit.*, 52—a fragment of parchment from the lower church may be as early as the eighth century.

6. Cf. Griffith, *Liverpool Annals*, XIV, Pl. XLVII, 2. The amphora shown in the grave is a known sixth-century type and it is found in the latest pagan graves in Nubia. Cf. Junker, *Ermenne*, Tafel XIV, etc.

7. Griffith, *op. cit.*, 63.

8. Junker, *Ermenne*, 126 ff.

9. Firth, *Arch. Survey of Nubia*, Rep. 1909-10, 39 ff.; cf. *op. cit.*, cem. 112, grave 28; for a Christian burial stela from an X-group grave, see Reisner in *Harvard African Studies*, I, 197, and Saint-Paul Girard in *Bull. de l'Institut. fr.*, XX, 111-112.

10. Monneret de Villard in *Annales du Service*, XXXI, 9; 'Probabilmente del VI secolo.'

been met with in late sixth-century Nubia, as would be natural with a people who had for long been staunch opponents of Christianity and who were for the most part illiterate, primitive, and therefore conservative, it may be supposed that paganism with its accompanying rites subsisted, openly and in secret, for many years. Egypt is a notable example of the difficulty with which the last traces of an inherited religion are finally stamped out. In the middle of the fifth century pagan temples still flourished in Upper Egypt, and the archimandrite Shenute mentions Petbe, Ptah, Rhea, Apollo, Zeus, Ares and others as gods regularly worshipped by his pagan fellow-countrymen.<sup>1</sup> According to Zacharius the Scholastic, there was, in 485, a Temple of Isis near Alexandria which was regularly attended, while he describes the Christians of the neighbourhood as weak in faith and only too willing to shut their eyes to such evidence of pagan worship in return for a suitable bribe.<sup>2</sup> The Jacobite Patriarch, Andronicus (c. A.D. 620), is said to have found pagan temples still in use in Egypt<sup>3</sup>; Pisentius of Coptos, in the seventh century, declared that idolatry was still practised in his day<sup>4</sup>; even in the eighth century, when Egypt had long been under Arab rule, a sorcerer in the Fayûm was wont to invoke Isis, Horus, and Nephthys in his charms,<sup>5</sup> while the inhabitants of El-Kaïs (Kynopolis) still worshipped Selket, the scorpion goddess,<sup>6</sup> under the very eyes of the monks of the neighbouring city of Oxyrhynchus.

On the other hand, the very illiteracy of the majority of the Nubians may have facilitated the spread of Christianity. The resistance to Christianity in Egypt, so noticeable in the fifth century, was largely due to the fact that education was in the hands of the Hellenes, while, for the cultivated man, the flower of literature was necessarily pagan in content. Such resistance was only counter-balanced by the influence of the philosophical schools of Hellenistic Alexandria which were predisposed to theological and, especially, mystical speculation and were, on that account, attracted towards Christianity.

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1. Erman, *Handbook of Egyptian Religion*, 1907, pp. 237 *seq.* For the pagan pagarch, Kollouthos, in the sixth century, see p. 89.

2. See J. Maspero, 'Horapollon et la fin du paganisme,' in *Bull. de l'Institut. fr.*, XI, 171 ff. For survivals of paganism in Egypt, see the brilliant chapter by J. Maspero, 'Le peuple égyptien au vième et au viième siècles,' in *Hist. des Pat. d'Alex.*, 23-64.

3. Maspero, *Bull. de l'Institut. fr.*, XI, 186.

4. Amélineau, *Études sur le christianisme en Égypte au VIIème siècle*, 107.

5. Erman, in *Ä.Z.*, XXXIII, 43-51.

6. Salkit, سلقيط. See *Patr. Or.*, V, 145.

In primitive Lower Nubia, as in mediaeval England, the power must have lain rather with the wandering preacher with gifts of oratory and of 'story-telling' such as the oriental loves. Though, indeed, it is probable that the theology thus taught was not of the purest kind, and, no doubt, it received more than a touch of local colour to make it acceptable to the audience.

In the lack of such literature as we have from Egypt, archaeology comes to our aid and shows clearly that the change was gradual. This is nowhere more clearly marked than in the burial customs of the Nubians, though it is true that in matters of life and death the instinct is rather to cling to the old beliefs, sanctified by tradition, than to trust to the new. Human and animal sacrifice for ritual purposes had been customary in Nubia since the third millennium B.C.<sup>1</sup> In the sixth century A.D. such barbaric customs were still in use at the time when Julian and Longinus were at work among the Nubians.<sup>2</sup> In the cemeteries, the first sign of the direct influence of Christianity is the disappearance, at first partial and finally total, of such sacrifices accompanying the burial.<sup>3</sup> At the same time there is a noticeable decrease in the number of funerary offerings, in particular of pottery vessels containing food and drink for the dead. Finally a characteristically Christian type of grave is evolved, orientated to the east and west and accompanied, as a rule, by a memorial stela in Greek and a lamp and incense burner. Even in such graves as these the old custom of placing pottery vessels in the grave did not at once disappear except in the more enlightened centres of Christianity such as Ibrîm, the site of an early bishopric, and at Faras, the capital city of Lower Nubia at this time.<sup>4</sup> It will be remembered that in the tombs of the fourth-century Christian necropolis at Khârga a niche was still provided in the outer tomb-chamber for the reception of offerings.<sup>5</sup> Both in Egypt and in Nubia, however, whether by reason of the continued interdictions<sup>6</sup> of the theologians and the ecclesiastical administration, or

1. See Reisner, *Kerma*, Parts I-III, 440; and Reisner, 'The Pyramids of Meroe and the Candaces of Ethiopia,' in *Sudan Notes and Records*, V, 181.

2. See W. B. Emery, 'Prelim. Report of the Arch. Survey of Nubia,' in *Annales du Service*, XXXII, 38-46.

3. See Kirwan, 'Oxford University Excavations at Firka,' in *Journal of Egypt. Archaeology*, XXI, 192 ff.

4. Griffith, 'Pakhoras-Bakharas-Faras,' in *Journal*, XI, 259.

5. Winlock, 'The Egyptian Expedition to Khargeh,' in *Bull. Metropolitan Museum of Art*, New York, 1909-10; 199-201, 222-228.

6. See the references to patristic literature in Grûneisen, *Les caractéristiques de l'art copte*, Florence, 1922, 38, note 3.



through a realisation that the Christian doctrine of the resurrection rendered provision for the bodily needs of the dead unnecessary, the traditional funerary offerings were no longer included with the burial.

There are many pagan tombs in Lower Nubia which may well be as late as the close of the sixth century. At the same time, cemeteries of graves, such as those at Ibrîm,<sup>1</sup> surmounted by cupolas—an architectural element foreign to Nubia—or those of Faras,<sup>2</sup> show that Christianity had taken root in certain centres. This transitional stage between paganism and Christianity is well illustrated by the combinations of pagan and Christian emblems which were frequently used to mark pottery, bronze, or silver vessels at this time.

By the middle of the seventh century, however, Christianity seems to have been generally adopted in Lower Nubia. There is no trace of pagan burials dateable as late as this. The reasons for this expansion may be found, firstly, in the immigration of Christians from the north, and, secondly, in the political reorganisation of the Nubian kingdoms.

During the first half of the seventh century two severe persecutions compelled the monophysite Christians of Egypt to seek refuge in Nubia. The first, the Persian invasion of A.D. 619, resulted in a wholesale devastation of the monasteries and a massacre of the Christian population from the Delta to Syene, and contemporary documents such as the Life of Pistentius of Koptos, the Syriac Chronicle of Severus, and the letters and sermons of the monks of Thebes and the neighbourhood bear witness to the barbarisms perpetrated by the Persian soldiery.<sup>3</sup> The Persians, having established their supremacy by such rigorous measures, were, on the whole, tolerant in their attitude towards the Copts for the rest of their stay. But the latter were not to be left in peace for long, for, with the appointment by Heraclius of Cyrus, Bishop of Phasis, to the patriarchate of Alexandria, a fresh persecution commenced.<sup>4</sup> The latter, having failed to pacify the Copts by the ingenious Monothelite formula for the union of the Monophysite and Melkite churches, decided that force might succeed where the subtle refinements of imperial theology had failed. In 631 the persecution began and the biography of the Patriarch Isaac shows plainly to what lengths

1. Monneret de Villard in *Annales du Service*, XXXI, 9.

2. Griffith, in *Liverpool Annals*, XIV, 63.

3. Amélineau, *op. cit.*; see the 'Syrian Chronicle' quoted by Butler, *Arab Conquest*, 72. Also Winlock and Crum, *Monastery of Epiphanius*, I, 102.

4. Butler, *op. cit.*, 174.

the Melkites were prepared to go.<sup>1</sup> Melkite bishops were appointed to every city as far as Antinoë, and it was to southern Egypt and Nubia, over which Cyrus had no control, that the exiled clergy fled.<sup>2</sup>

Between A.D. 580 and 652 the kingdom of the Nobatae and that of their neighbours to the south, the Makoritae, united under the rule of one supreme king<sup>3</sup> whose capital city was Dongola. With the growth of a central government, Nubia from Aswân to Kabûshiya was divided into provinces and administrative districts, each with its full complement of secular and ecclesiastical officials. For in Nubia as in the Byzantine state, the Church played an important part in the work of government, while the fresco on the walls of the Church of 'Abd el-Qâdir at Faras, depicting an Eparch of Nobadia<sup>4</sup> holding a model of a church—much as the founders of cathedrals were depicted in mediaeval art—shows that the secular officials played no less a part in the development of religious life. Thus the Christian Nubian kingdom, which was to flourish for more than five centuries, was placed on a sure foundation.

1. Porcher, 'Vie d'Isaac' in *Patr. Orient.*, XI, 302 ff.

2. Butler, *Arab Conquest*, 183, note 3.

3. See Kirwan, 'Notes on the Topography of the Christian Nubian Kingdoms,' in *Journal*, XXI, 57 ff.; for an alternative view, see Monneret de Villard, 'Note Nubiane,' in *Aegyptus*, Anno XII, fasc. 4, 309-16; and 'I vescovi giacobiti della Nubia,' in *Mém. de l'Institut. fr.*, t. LXVII, 57.

4. See Griffith, 'Faras,' in *Liverpool Annals*, XV, Pl. 32. The inscription below is as follows: . . . ὁδῆγγισον . . . ρικουδᾶ, ἐπαρχον Νοβαδίας. See Griffith, *op. cit.*, 70. For the title, compare ἐπάρχου Νοβαδ[ας] on a tombstone in Lefebvre, *Inscript. grecques-chrét. d'Égypte*, no. 665.

## REVIEWS

*The Excavations at Tall Chagar Bazar.* By M. E. L. MALLOWAN.  
Oxford University Press, 1936. Price 10s. 6d. net.

This account of Mr. Mallowan's recent excavations at Chagar Bazar under the auspices of the British Museum and of the British School of Archaeology in Iraq is a welcome supplement to the similar book on his work at Arpachiyah, and the price, if account be taken of the number and quality of the illustrations, is very reasonable.

The first section consists chiefly of a topographical survey of the Ḥabur region, a discussion of the place and importance of Chagar Bazar relative to other sites in that country, and an explanation of the significance of the different strata on that site. The Ḥabur can never have been used extensively for river traffic but was often employed as a 'limes,' and doubtless a caravan traffic followed roughly the line of the river.

The second section of the book discusses the history of the mound and its relative chronology. Summaries are given of the sequence of strata, their chronology and interpretation, and a number of conclusions are drawn. We may note as special points of interest the town planning and good drainage of level 2, the solid brick platform of 12 representing a re-levelling of the whole site above the destroyed houses of level 13 which was characterised by 'Samarra' pottery, and the absence of structures in level 15 (immediately above virgin soil) perhaps indicating that at that period there were only huts.<sup>1</sup>

Section three contains a detailed account of all the objects illustrated and a catalogue of all the graves containing objects. It is perhaps unusual to give the conclusions before the detailed evidence whereon they are based, but I think the practice has much to commend it. I have often found difficulty in seeing wood for trees when wading through a mass of unfamiliar details. Here, with the conclusions plainly stated at the beginning, there is no excuse for confusion since the reader is forewarned concerning the relative importance of individual finds.

The mound was occupied from the beginning of the chalcolithic period until its end. During the period corresponding to Nineveh 3 and 4 (the Uruk period so flourishing a time in Sumer) the site of Chagar Bazar seems to have lain waste, and it is suggested that this depopulation may have been general in the Upper Ḥabur region. About 3000 B.C. the site was reoccupied and continued to flourish until about 1500 B.C.

1. Or tents?—R. W. H.

Mr. Mallowan suggests that the Ḥabur country, fertile though it is, is but a backwater compared to Syria and Mesopotamia, and therefore only prospered when a strong central government ensured the safety of the caravan routes.

The picture of the chalcolithic civilisation presented by Nineveh and by Arpachiyah and Tall Ḥalaf is supplemented and amplified. It is interesting to learn that Nineveh 5 extends from Jamdat-Nasr times till the early dynastic period in Sumer.

The evidence for Syrian and Mesopotamian influences in the Aegean is strengthened by such details as the 'solid lug handle' and 'bridged-trough spout' as well as by more spectacular elements such as the double axe, the bucranium, the mother goddess and her dove, and the circular buildings on stone foundations. To these we might also add, I think, stamp seals of the kind represented on Pl. I, no. 8, and Fig. 7, nos. 3, 4, 5 and 6. I think also it is not unlikely that from the Ḥabur country may have come the toggle pin which is so important a feature in the prehistory of Cyprus and Central Europe.

Mediterranean connexions are also suggested by the bottom levels at Chagar Bazar, where Mr. Mallowan has found monochrome burnished pottery paralleled by unpublished sherds from the lowest levels at Ras Šamra and by sherds from the lowest strata at Gebeil. He even compares one buff sherd with a finish resembling porcelain to neolithic pottery from Hal Tarxian in Malta.

Important evidence is adduced on the sequence of designs in the prehistoric wares of the Tall Ḥalaf and Samarra groups. Thus we learn that the 'mouflon' (really a bucranium with reversed horns) is later than the true bucranium and is never found at any level earlier than 12. The bucranium proper, dominant in the earlier strata, tends to disappear in the later levels. We notice the 'tendency for naturalistic designs to occur in the earliest period and later on to disappear in favour of geometric stylisations.' The dancing maidens motive, which at Arpachiyah seemed to be an exception to the rule of progressive stylisation, may possibly fall into line with the rest, since at Chagar Bazar the only representations of human figures (Fig. 27, nos. 21 and 22) come from very early levels (14 and 15 respectively). The author's argument for the derivation of the stippled motive from representations of leopard skins is supported by drawings of the animal itself from Chagar Bazar and by what look like leopard skins spread out like rugs on sherds from Tall Ḥalaf. Other animals depicted on the prehistoric pottery were the goat, the ibex, an 'animal with a cleft tail,' and a curious little group of beasts which the author compares to those on the famous Maikop vase (a comparison rather insulting to that masterpiece).

Birds represented include a spread eagle and a line of feeding storks (?).

One Samarra sherd (Fig. 27, no. 14) bears a very puzzling frieze. The author's tentative explanation of stylised flowers between huts is not very convincing, but I have no better one to offer, since a vague



resemblance to certain Roman ovolos on Samian bowls of Claudian date must surely be accidental.

Mr. Mallowan makes some interesting observations on the tendency of an apricot slip to develop and fade into a cream slip according to the intensity of the firing. He remarks that 'when there is a cream slip the paint nearly always remains a bright red, whereas on the deeper buff and apricot slips the paint will deepen in tone to a black.' Late in the chalcolithic period there appeared a red slip recalling that of Mohenjo Daro and occasionally even a pattern reminiscent of one from the Indian site.

From level 4 comes a soapy ribbed sherd resembling 'Grey Minyan' and incised sherds of Nineveh 5 type. From level 1 comes a single fragment of 'Hurrian' ware, valuable for chronological purposes. (At Nuzi the 'Hurrian' pottery could be dated between 1650 and 1400 B.C. while at Aššur similar pottery was dated about 1300 B.C.) The scarcity of this pottery at Chagar Bazar contrasts with its relative frequency at Tall Atchana on the Middle Orontes, the site excavated (but not yet published) by Sir Leonard Woolley.

Mr. Mallowan is to be complimented on his clear and illuminating account of his excavations, and his architect, Mr. Macartney, on some excellent drawings.

R. W. HUTCHINSON.

*The Assyrian Laws.* Edited with translation and commentary by G. R. DRIVER, M.A., and JOHN C. MILES, Kt., M.A. 9×6, pp. xxiv+534. Oxford: Clarendon Press, 1935. 35s. net.

This volume is the result of a happy collaboration between two eminent scholars, each outstanding in his own field, and is one of the most important works in the sphere of Assyriology that have appeared for several years. It will also be a boon to the Old Testament scholar and the student of comparative sociology and jurisprudence.

The Assyrian laws at present known comprise the large body of Middle Assyrian laws dating from the middle of the Second Millennium B.C. and some fragments of Old Assyrian laws from the latter part of the Third Millennium. The dating of the documents and other matters regarding them are discussed briefly in the opening sections of the book.

G. R. Driver is responsible for the transliteration, restoration and translation of the texts, which are made in careful dependence on earlier attempts and now supersede these. His critical and philological notes contain much of first-class importance to lexicographers of the Semitic languages, and he has provided also a most useful Assyrian glossary.

The larger portion of the work is a thorough and detailed legal commentary on the subject-matter of the laws by Sir John Miles, who makes comparisons with the Sumerian, Babylonian, Hittite, Hebrew, Greek, Roman, Jewish, Muslim, Indian and English codes and offers an apprecia-

tion and criticism of the work done in this field by Koschaker, Cuq and others.

The book is completed by a very serviceable English and Accadian index. It will for long remain the standard work on the Assyrian laws, and scholars will hope that the authors will be enabled in the near future to fulfil their project of editing in similar fashion the Babylonian and Hebrew codes.

CECIL J. MULLO WEIR.

*Problems of the Hebrew Verbal System.* By G. R. DRIVER, M.A. (Old Testament Studies, No. 2.)  $9\frac{3}{4} \times 6$ , pp. xii+165. Edinburgh: T. and T. Clark, 1936. 7s. 6d. net.

This fresh and brilliant study of a much-discussed problem by a leading authority is exceedingly welcome, and will provoke much discussion as Driver dissents on some fundamental points from the opinions of his predecessors. The book is a notable example of the valuable contribution that can be made to Hebrew and Old Testament studies from the side of Accadian. The author is of the opinion that 'the two main strands of which Hebrew is woven are Accadian and Aramaean' (p. 151), and it is in the light of his study of the Accadian verb that he now propounds a novel, ingenious and very satisfying solution to the major problems of the Hebrew verbal system which had hitherto baffled investigators.

After a valuable introductory discussion of the biliteral theory of Semitic roots, Driver gives a careful analysis and criticism of the theories of Bauer, Bergsträsser and several other philologists concerning the evolution of the tenses in the Semitic languages and then expounds his positive reasons for his own view. His conclusion is that from the original forms *qátîl* and *qátul* (and secondary, *qátal*) there developed successively the Semitic 'perfect,' the 'present-future' (*yaqátîl*) and the 'preterite-imperfect' (*yáqtul*). The imperative (*qutîl*) was also later in origin than the original forms, and from it was evolved the 'jussive' (*yaqtûl*), differing in accentuation from the 'preterite.' Driver thus postulates a quite different origin for the Hebrew 'future' and 'jussive' respectively, and elaborates his view that many instances of the 'jussive' and 'waw consecutive imperfect' in the Old Testament are really survivals of a Hebrew 'preterite' corresponding to the Accadian preterite. This theory he then applies to several Old Testament passages whose syntax and interpretation have hitherto given difficulty.

Several other matters also are re-examined, including the origin of the personal pronouns and pronominal suffixes in the Semitic languages and of the vocalic and consonantal additions appended to certain verbal forms. Divergent methods of vocalisation within the Accadian and Hebrew tense-patterns also receive detailed treatment, and a new explanation is offered of several difficult usages of the perfect in the Old Testament.

Of paramount importance are Driver's notes on the composite nature of the Hebrew language, and his warning against unnecessary emendations of the Massoretic text deserves careful attention in this regard. 'The pages of learned publications,' he points out, 'are strewn with the unfortunate results of an unimaginative and injudicious resort to the concordance' (p. 152).

The book is fully annotated and has admirable indexes of subject-matter, scholars' names and Biblical passages besides a well-chosen bibliography of periodical literature since 1877. It breaks fresh ground in several directions and is an indispensable supplement to the standard Hebrew grammars. All Semitic and Old Testament scholars should possess a copy of the work, whose remarkably low price places it within the reach of every purse.

CECIL J. MULLO WEIR.

*A Grammar of the Phoenician Language.* By ZELIG S. HARRIS. (American Oriental Series, Vol. 8.) 10×7, pp. xi+172. Philadelphia: American Oriental Society, New Haven, Connecticut, 1936.

This grammar supplies a greatly felt want to students of the Semitic languages as no systematic and comprehensive treatment of Phoenician had been attempted for nearly seventy years. The grammar and vocabulary of the language are still unfortunately very imperfectly known and the subject is complicated by the existence of several different dialects. There is, moreover, a wide difference in date between the earliest and the latest documents and some periods are without any documentation, while such documents as do exist are brief and formal in character. Fresh interest has recently been given to the study of Phoenician by the discovery of the Ras Shamra texts, but as it is still uncertain what is the relation of their dialect to Phoenician, the writer has wisely refrained from drawing upon them for his evidence.

For the purposes of his work Harris has made a fresh collation of the Phoenician, Punic and Neo-Punic inscriptions, and as these possess no system of vowel-notation he has been compelled to resort to the somewhat precarious evidence of Egyptian, Accadian, Biblical and Classical transliterations in order to ascertain the pronunciation of the words. One whole half of his discussion is necessarily devoted to the phonology of the language, which entails also notes on the origin of the alphabet. The second half of the grammatical exposition deals in turn with the various parts of speech, the forms current in the various dialects being carefully differentiated. After a short section on syntax the author offers some valuable observations on the history of the language and its place within the Semitic group. The grammar is followed by a very serviceable glossary which occupies one half of the volume and a full and useful bibliography closes the work. An index would have been useful



but the table of contents largely supplies its lack. The book is a welcome addition to the standard works on Semitic languages.

CECIL J. MULLO WEIR.

*Excavations at Nuzi.* Conducted by the Semitic Museum and the Fogg Art Museum of Harvard University with the co-operation of the American School of Oriental Research at Baghdad. Volume III: Old Akkadian, Sumerian and Cappadocian Texts from Nuzi. By THEOPHILE JAMES MEEK. Harvard Semitic Series, vol. X. 11×8½, pp. i-lix, plates i-xciv. Cambridge, U.S.A.: Harvard University Press. London: Humphrey Milford, 1935. \$6.

The texts from Nuzi hitherto published have illustrated the history of the city in the fifteenth and fourteenth centuries B.C. and have been of interest especially owing to the evidence they gave of the predominantly Hurrian character of the population at that time. The texts appearing in this volume come almost exclusively from the lower, Third Millennium, strata and open up further interesting problems.

The contents of the 230 tablets are various. One of the most interesting is a map (no. 1) which Meek describes and discusses. No. 2 is a fragment of a building plan and no. 3 is an inscribed bulla. In nos. 4-12 we have 'the largest single collection of Old Akkadian letters ever published,' and Meek gives a transliteration and translation of the seven best-preserved of these as well as of no. 22 (a Sumerian word-list giving names of professions and occupations), no. 223 (a 'Cappadocian' letter) and no. 230 (a Middle-Assyrian fragment of an inscription of Ithi-teshup, king of Arrapha). Meek assigns the Old Akkadian and Sumerian texts (nos. 1-222) on grounds of grammar, orthography, phonology and palaeography to 'a time fairly early in the Agade period.' The five 'Cappadocian' tablets (nos. 223-227) he believes to belong to the earlier part of the 'Old Babylonian Dynasty,' and to the same period ('First Babylonian Dynasty') he refers the fragments 229-230. No. 228 dates from the Third Dynasty of Ur.

Most of the documents are business-records, including inventories, wage-lists and receipts, but a considerable number are fragmentary. They throw little light on the history and customs of the period, but a few very important facts can nevertheless be deduced. An examination of the personal names shows that while both Accadian and Sumerian names are common the former greatly predominate, while Hurrian names are quite unknown although Hurrian and Elamite elements seem to occur. Meek legitimately infers that the population was Accadian and that the Hurrian migration took place 'not earlier than the beginning of the Second Millennium.' Moreover, the name of the city in the pre-Hurrian period was not Nuzi but Gasur (or perhaps Gasag).

Besides the very valuable and full introduction, Meek has compiled



exhaustive indices of the personal and place-names, names of professions and names of months. Some of the professional and month names were hitherto unknown. The nature of the various texts is briefly but adequately indicated in an excellent list of contents which is followed by a register of the tablets. The bulk of the book is taken up with the copies of the tablets, which are clearly and beautifully made. Eight photographs of representative tablets are appended to illustrate the various scripts.

The book fully lives up to the high standard set by the earlier volumes of the series and is a credit both to the author and to the publishers.

CECIL J. MULLO WEIR.

*Gaster Anniversary Volume: Occident and Orient.* Being Studies in Semitic Philology and Literature, Jewish History and Philosophy and Folklore in the widest sense. In Honour of Haham Dr. M. Gaster's 80th Birthday. Edited by BRUNO SCHINDLER, Ph.D., in collaboration with A. MARMORSTEIN, Ph.D. 10×6½, pp. xx+570, plates 8. London: Taylor's Foreign Press, 1936. £3, 3s.

This handsome volume contains important original contributions to learning in several different branches of knowledge representing the catholic interests of the great scholar to whom they were presented. The names of the writers are a sufficient guarantee of the outstanding value of the book, and it can be heartily commended to all students of magic, religion, folklore, linguistics and philosophy, and especially to those interested in Jewish history and culture.

Professor S. Langdon contributes a Babylonian liturgy to Nabu with valuable philological notes, and Professor Pettazoni writes on confession of sins in the Hittite religion. From the pen of G. R. Driver we have a characteristically brilliant article on 'Confused Hebrew Roots,' while from Professor W. O. E. Oesterley comes a most opportune sketch of ancient Persian angelology and demonology. Very interesting are Professor M. A. Canney's discussion of 'Boats and Ships in Temples and Tombs' and Professor W. B. Stevenson's examination of the pictorial significance of numbers in ancient chronicles. T. H. Gaster's notes on a new Asianic language also deserve careful attention and Professor E. O. James has some very helpful things to say about the origins of ethical monotheism. Old Testament studies are well represented by Rabbi S. Daiches, Professor A. Kaminka, Professor S. Krauss, Professor J. Morgenstern and Professor J. L. Landau, while in the fields of Apocrypha and Pseudepigrapha the article by Professor D. S. Margoliouth on a new dating for Ben Sira and that by Dr. R. Eisler on the Sadoquite 'Book of the New Covenant' call for special notice. Dr. Travers Herford's thesis about Pirke Aboth should also not be overlooked.

Important contributions are made to comparative folk-lore by Dora E. Yates ('A Romani Tale'), H. Gordon Ward ('A Spanish Legend in English Literature'), Principal W. R. Halliday ('A Modern Greek Folk-

tale from Samos'), Mrs. M. Hasluck ('An Albanian Ballad') and others; there is also a variety of articles dealing with aspects of religion and magic. Jewish studies cover the fields of literature, art, philosophy, history and biography, and there are four very interesting collections of letters besides several other unpublished texts. Mr. E. N. Adler's illustrated dissertation on 'Jewish Art' should not be missed, and the articles on Judaeo-Spanish and Yiddish by Professor N. B. Jopson and Dr. M. Weinreich will repay careful study. The three appreciations of Dr. Gaster's life and work provide interesting reading and a useful bibliography of his chief books and articles has been added.

Most of the fifty-eight contributions in this volume are in English, ten being in German and one in Hebrew. In articles XIV, XXVIII and XLV the English would have benefited in parts by a more careful revision, but the book is carefully edited, with very few misprints. It is a pleasure to handle and use the volume and its contents should attract widespread attention in this country and abroad.

CECIL J. MULLO WEIR.

*Concerning Progressive Revelation.* By VIVIAN PHILIPS.  $7\frac{1}{2} \times 5$ , pp. viii+114. London: Watts and Co., 1936. 1s.

The title of this book is somewhat of a misnomer. The author discusses neither revelation in general nor progressive revelation in particular but attempts to trace the origin of certain Christian beliefs to heathen myths and legends. Those who are interested in speculations of this nature will find the book readable and well written if a trifle elementary. The writer's thesis is that the heathen myths and legends which he cites were not partial revelations preparing the way for the Christian revelation.

CECIL J. MULLO WEIR.

*Sigillata Wares in the Near East: A List of Potter's Stamps.* By J. H. ILIFFE. Humphrey Milford: Oxford University Press, 1936. 1s.

This is a valuable little book. It attempts a task that ought to have been done long ago, a task that past neglect has made more difficult. For this neglect there is no real excuse. It is common ground, and as long ago as 1915 the present writer pointed it out, that the excavator owes a duty to all his finds whether he is interested in them or not. But 'there is a deal of human nature in man,' and in the East sigillata wares have been the Cinderella of archaeology. Not till the advent of Mr. Iliffe, trained in the Romano-British field where sigillata is *faute de mieux* treated as a real princess, have these wares in the East received due deference and recognition of their right to be studied. This statement is, of course, not quite true, as Mr. Iliffe's review of previous attempts at classification shows. Yet it is lamentably certain that in the past excavators have considered them beneath their notice.



It seems that in the present state of our knowledge classification into 'Samian' and 'Pergamene' is unsound. Though the two groups are distinct both probably comprise various fabrics, and yet do not make up the count. And the place of origin of one fabric only is as yet definitely known, Tschaudarli, near Pergamum. It is to be hoped that more dutiful attention on the part of excavators will remedy this state of affairs. And they will be helped in their endeavours by what is not the least valuable part of Mr. Iliffe's work, the list that he appends of potters' stamps on sigillata made or found in the Near East.

J. P. DROOP.

*Controverses autour de Troie.* Par CHARLES VELLAY, Docteur ès Lettres. Collection d'Études Anciennes publiée sous le patronage de l'Association Guillaume Budé. Paris : Société d'Édition 'Les Belles Lettres,' 1936.

It is an admirable thing that received opinions should from time to time be challenged. If they are wrong the sooner the world knows it the better. And if the controversy ends in the crushing of heresy the upholders of the old view are left the stronger for the exercise. To overthrow the challenge they have had to make themselves familiar again with every detail of the grounds for their belief. What was a dead creed has become again a living faith. These reflections are roused by the perusal of Dr. Vellay's *Controverses autour de Troie*—a delightful title which breathes the true spirit of the *Iliad*.

The book makes a vigorous and very well argued attack on the opinion generally held since the time of Schliemann, that the Troy of Homer was situated at the site of Hissarlik. It becomes clear that in the author's view the right site is that of Bali Dag, but he is not so much concerned to point to what may be the right site as to prove that Hissarlik does not fulfil the necessary conditions, and must be the wrong site.

It would ill become one who does not know the ground to pronounce on the success or failure of Dr. Vellay's arguments in what is mainly a question of geography. They appear, indeed, formidable, and one might come near to believing the truth to be in these pages, were it not that the doubt creeps in whether Homer himself was not perhaps ignorant of the detailed geography of the Trojan plain. Which, if it were so, would put the truth nowhere.

Dr. Vellay puts his arguments with great cogency. In one case the cogency of expression almost conceals the unsoundness of the argument. Desirous of showing that Doerpfeld is wrong in claiming that the word *πόντος* cannot mean the straits, Dr. Vellay points to *Il.*, iv, 422-426, where three words, *θάλασσα*, *πόντος* and *ἄλς* are used to mean exactly the same thing. Therefore for Homer the words are interchangeable. But in *Il.*, xxi, 125, *ἄλς* is used for the straits. *πόντος* = *ἄλς*. Therefore *πόντος* can mean straits. *Q.E.D.* The cogency is misapplied. *πόντος* may mean

straits, but it does not follow from the argument. For a poet might well use together in their general sense of sea three words, each of which has its own specific narrow meaning, yet not be able to use one for the other when the specific meanings are in question. In English, for instance, a poet might use the words 'ocean,' 'flood,' and 'main' quite interchangeably with the same general meaning, sea. But in writing of the tide flowing up an estuary neither of the other two could be substituted for 'flood.'

J. P. DROOP.

*The Doctrine of Survivals : A Chapter in the History of Scientific Method in the Study of Man.* By MARGARET T. HODGEN. Allenson, 1936. 5s.

This is a specialist study which will appeal in the main to the increasing number of students interested in the methodology of the social sciences. For the second time within a century, says Miss Hodgen, they are confronting a sustained attack upon the idea of progress as an organising principle in research, and it is for this reason that she considers the time ripe for a review and an appraisal of one of the most important methods utilised in the establishment of this principle.

She is at pains to show that neither Morgan nor McLennan, as has sometimes been claimed, can be said to have anticipated Tylor in the formulation of the doctrine of survivals, nor in the precise method of its application. But from the date of publication of *Primitive Culture* in 1871 the introduction of a new procedure, based on the idea that there are 'processes, customs, opinions, and so forth, which have been carried by force of habit into a new society . . . and . . . thus remain as proofs and examples of an older condition of culture within which a newer has evolved,' gave an immediate fillip to research in certain fields, notably that of folk-lore, and immediately stimulated writers such as Lang, Frazer and Gomme in their inquiries into the origins of mythology, religion and political institutions. Since then, this 'inverse method of assessing an evolutionary process' has been applied in many other fields; but it is only recently that the assumptions underlying it have been attacked with the denial by S. A. Cook and others of the functionless character of many so-called survivals. Attention has been shifted from the assumption of progressive social development to the undoubted facts of cultural and institutional persistence, and a necessary re-orientation of inquiry is taking place which may well have importance not only for the social theorist but for the proponent of social reform.

E. I. BLACK.

*Complement or Alexin.* By T. W. B. OSBORN. Pp. xi+116.  
Oxford University Press, London, 1937. 7s. 6d.

Quite early in the course of the study of the resistance of animals to infective disease it was observed that the fluid portion of the blood



tended to destroy bacteria against which the animal possessed or had acquired a degree of immunity. Not long afterwards it was shown that this destruction or lytic action of serum could be developed not only against bacteria but also against other cells of diverse origin. If, for instance, a rabbit received a series of injections of the red blood corpuscles of the sheep its serum acquired the property of breaking up the cells when they were mixed with it in the test tube. This activity is due to the combined action upon the cells of two substances: one, the result of the immunizing process, called an antibody, and the other, a normal constituent of the serum of all animals, known as complement or alexin. It is with the second of these substances that this book is concerned. Since complement was first described a very large number of bacteriologists have concerned themselves with inquiring into its nature and mode of action. In this short monograph the author has collected together most if not all of the more important facts acquired in the course of these studies. The book itself is a summary and does not therefore lend itself to further summarisation. The author in his discussion of the constitution of complement uses two quite unnecessary verbal atrocities, 'midstuk' and 'endstuk,' unnecessary because the terms 'midpiece' and 'endpiece' are adequate and established. The statement (page 36) that 'it has never been observed that a mixture of toxin and antitoxin fixes complement *in vitro*' does not take account of work in H. R. Dean's laboratory on this subject. It may be that the guess that complement is an enzyme is as good as any other, but the discussion, on pages 77 and 89, of the bearing of the facts relating to anaphylaxis on this question is quite inadequate and apt to be entirely misleading. 'Thermostable' on page 17, line 16, would appear to be in error for 'thermolabile.'

In the main the book does what the author appears to have had in mind: it provides a convenient summary of existing knowledge and discusses more or less critically the problems that have arisen, and to a large extent still remain, in connexion with the study of this important and elusive substance.

H. D. W.